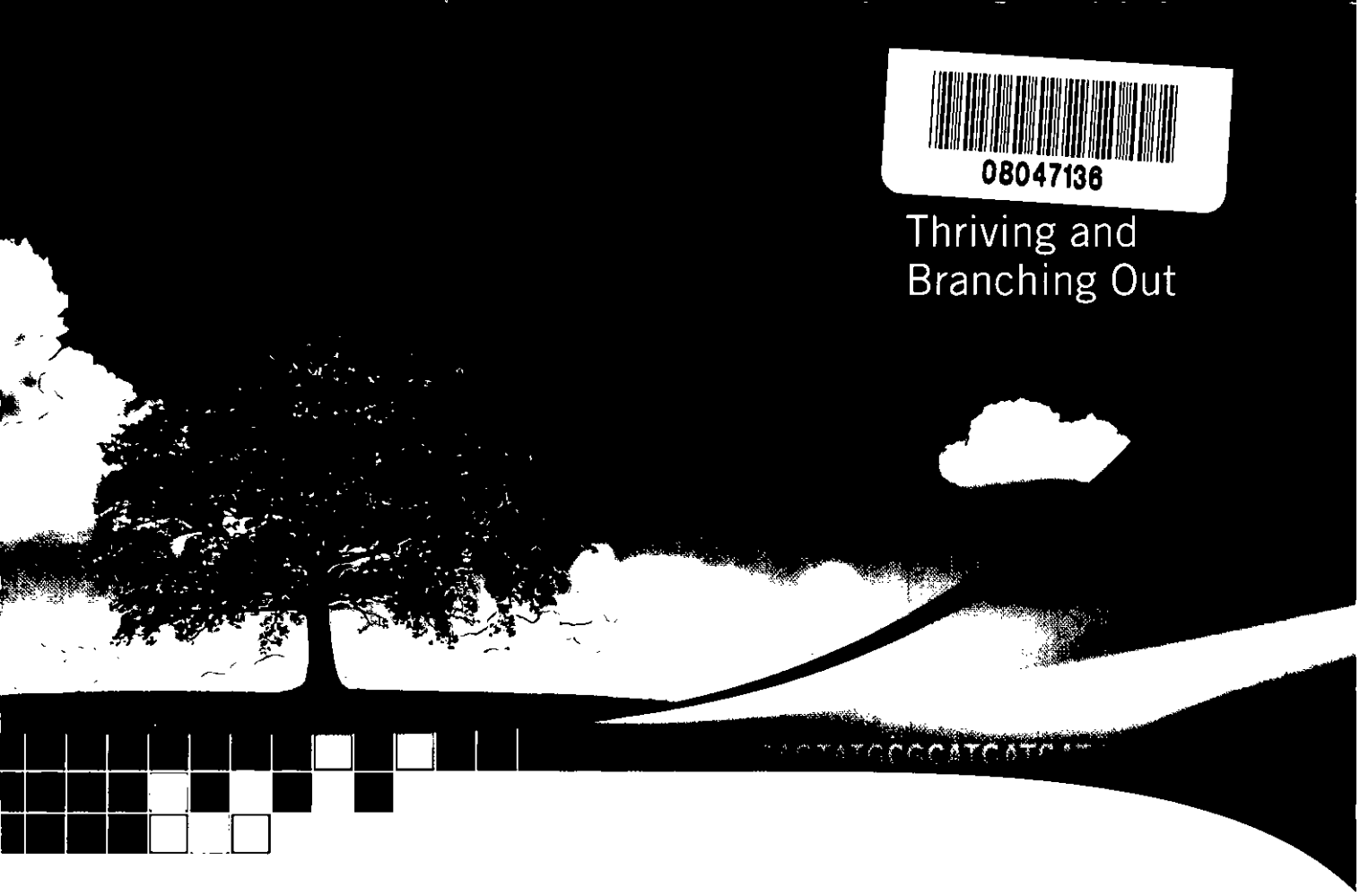


Thriving and
Branching Out

SEQUENOM®

2007 ANNUAL REPORT

Content:

Except for the historical information contained herein, the matters set forth in this annual report regarding the Company's growth or plans regarding the Company's genetic testing and molecular diagnostics business, expected realization of benefits during the second half of 2008, opportunities, expectations regarding nanopore technology, particularly nanopore-based single molecule readout technology, and its potential, plans to introduce new products, anticipated new products and market opportunities such as pathogen typing and identification, plans to complete development of a Trisomy 21 test and related expected performance specifications and plans to validate additional markers, plans to request market clearance from the U.S. Food and Drug Administration for RhD and Down syndrome tests, anticipated growth in the Company's core genetic analysis business and advances in molecular diagnostics, expanding into new markets, extending product portfolios, further improvements to the NanoDispenser software in 2008, the expectations regarding capabilities of the Oncomutation panel, the aims, impact, or expectations and potential of SEQureDx technology, the Company's plans to expand research to identify fetal RNA markers to address routine Trisomy testing, realizing the full diagnostic application of nucleic acids and the impact on patients and healthcare, the goals of the Clinical Advisory Board, market opportunities and market potential, and expressions using the word "will" are forward-looking statements with the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995.

These forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially, including the risks and uncertainties associated with the Company's operating performance, demand for and acceptance of the Company's products, services, and technologies, new technology and product development and commercialization particularly for new technologies such as non-invasive prenatal diagnostics, reliance upon the collaborative efforts of other parties, research and development progress, competition, government regulation, obtaining or maintaining regulatory approvals, and other risks described from time to time in the Company's SEC (U.S. Securities and Exchange Commission) filings, including the Company's Annual Report on Form 10-K for the year ended December 31, 2007, most recent periodic quarterly report, and other documents subsequently filed with or furnished to the SEC. These forward-looking statements are based on current information that may change and you are cautioned not to place undue reliance on these forward-looking statements which speak only as of the date of this report. All forward-looking statements are qualified in the entirety by this cautionary statement, and the Company undertakes no obligation to revise or update any forward-looking statement to reflect events or circumstances hereafter.

Nurturing a Culture of Innovation

Advancing Through Leading-Edge Science and Technology

In today's competitive environment, our people are our core asset and our strategic edge. They are our roots and the foundation for a strong company. We recognize that recruiting, retaining, and developing talented individuals will continue to make us grow.

We place high expectations on ourselves and are proud to have an impressive group of professionals widely recognized across the industry for their expertise. At Sequenom, we have assembled a world-class group of scientific and business professionals.

Our people have come from leading academic and industrial laboratories, and other ventures from across the country and around the world. We strive to maintain a diverse, dynamic, highly-motivated and team-oriented workforce.

Ultimately, our success is driven by the professionalism and expertise of every member of our team. With a commitment to excellence, our employees demonstrate unwavering dedication to achieving a performance standard that sets us apart from our competitors.

"Ultimately, our success is driven by the professionalism and expertise of every member of our team."

Thriving

To Our Stockholders, Customers, Suppliers, and Employees,

We are proud to report on the significant growth by Sequenom during 2007. We believe growth is driven by innovation. Sequenom has always been committed to innovation, and in 2007 we continued to thrive and grow in all facets of our organization.

During the year we solidified our leadership in fine mapping, gained recognition for our methylation and quantitative gene expression solutions, and laid the groundwork for promising initiatives in genetic testing and molecular diagnostics.

Revenues in 2007 reached a record $41 million, up 44% compared with 2006, with growth in all segments of our genetic analysis business including MassARRAY® system placements, consumables and a dramatic increase in Contract Research Services. We controlled expenses while investing in research and development and commercialization activities that will begin showing benefit in the second half of 2008.

We also entered a business with enormous opportunity with the late-year launch of our first in a series of planned noninvasive prenatal genetic tests based on our proprietary SEQureDx™ Technology.

Recapping our genetic business accomplishments, we placed 55 MassARRAY systems in 2007, which is 21 more than in 2006, and we now have more than 225 systems in the field, each generating recurring consumable sales. While fine mapping and genotyping served as our primary growth drivers, we benefited from increasing contributions

from epigenetic and quantitative gene expression analysis applications, as well.

Important products introduced last year included our TYPER 4.0 genotyping software, which improves upon what we believe already is the industry's best available fine mapping and genotyping solution. Our new Assays-by-Sequenom service provides customers the flexibility to choose SNPs of interest with the convenience and reliability of off-the-shelf, pre-validated assay reagents, which can be access through our customer portal mysequenom.com.

We also took a major step toward entering the complementary whole-genome analysis market through the exclusive licensing of third-generation, single-molecule nucleic acid analysis technology from Harvard University. Although early in development, we expect this nanopore technology to deliver large-scale genotyping solutions in the near term, with longer-term potential to provide a commercially viable, rapid human genome sequencing solution for less than $1,000, a key step in personalized medicine.

The coming year looks promising as we expand into new geographies and introduce new and enhanced genomic analysis products. Already launched this year is our Cancer EpiPanel for high-throughput methylation profiling of DNA samples over hundreds of validated cancer-associated genes. We also plan to introduce new and more powerful next-generation assay, which, improve data quality and enhance ease of use. Working with the Health Protection Agency in the U.K. and the Centers for Disease Control and Prevention in the U.S., we anticipate a mid-year launch of an important iSEQ™ product for comparative sequence analysis that could open new multi-billion dollar market opportunities.

This will be an important year for our SEQureDx Technology for noninvasive prenatal diagnostics. We plan to complete development of a test that can directly assess risk of Trisomy 21 (Down syndrome) – a market estimated to exceed $1 billion annually in the U.S. alone. Our test will have the advantage of using a maternal blood sample, and comparative sequence analysis in the first trimester or early in the second trimester, which is earlier than invasive procedures that carry unnecessary risks.

> "With anticipated continued growth in our core genetic analysis business and advances in molecular diagnostics, we are optimistic about our future."

Development of this test was made possible by intellectual property we secured last year from Prof. Dennis Lo of the Chinese University of Hong Kong and earlier from ISIS Innovation Ltd., affiliated with Oxford University. Early this year we announced that our first multi-marker Trisomy 21 test indicates performance approaching 85%, plus or minus 5% ethnic coverage, greater than 95% sensitivity and close to 99% specificity. We expect performance specifications may further improve as additional markers are validated. We are finalizing LDTs for RhD incompatibility and recessive gender disorders to be run on our MassARRAY system, and are working with prominent institutions and thought-leaders to assess our RhD and Down syndrome technologies prior to requesting marketing clearance from the U.S. Food and Drug Administration.

With anticipated continued growth in our core genetic analysis business and advances in molecular diagnostics, we are optimistic about our future at Sequenom. I want to personally thank our employees, investors and stakeholders for their continued support.

Sincerely,

Harry Stylli, Ph.D.

President and Chief Executive Officer

Genetic Analysis Solutions

Meeting Customer Needs and Expanding into New Markets

Advancing Genotyping

Assays-by-Sequenom

Assays-by-Sequenom launched in 2007, and provides a convenient and cost effective way for customers to obtain ready-to-go mixed and validated assays. The new offering includes three levels of service, which researchers can choose from based on their needs. It decreases hands-on time and infrastructure requirements for assay set up. Assays-by-Sequenom enables larger scale studies with faster turnaround time, which further strengthens our competitive advantage in the single nucleotide polymorphism (SNP) fine mapping market.

TYPER 4.0

TYPER 4.0, developed through extensive collaboration with our customers, enables superior quantitative genotyping results. TYPER 4.0 significantly simplifies workflow, provides better data management, and presents a more user-friendly interface.

The software is used in conjunction with Sequenom's iPLEX® Gold assay for fine mapping genotyping applications, including studies validating the association of SNPs with specific diseases.

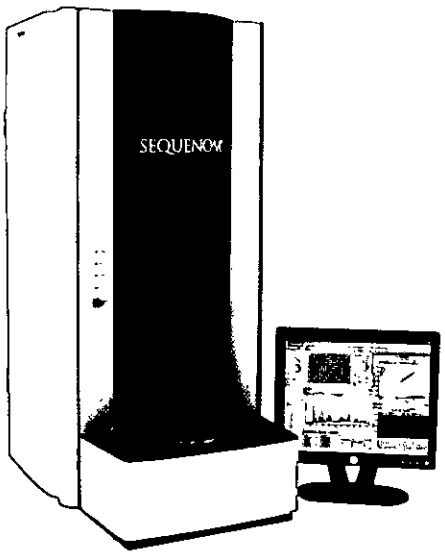
Increasing Market Share and Extending Product Portfolios

PCR Reagent Set

The PCR Reagent Set delivers a complete solution for high performance DNA amplification. All PCR components and reaction conditions are optimized and validated for iPLEX Gold genotyping and gene expression experiments. The PCR Reagent set is also bundled with the iPLEX Gold Reagent Kit and SpectroCHIP® Solid Supports, allowing customers to conveniently order all genotyping and gene expression analysis reagents from Sequenom.

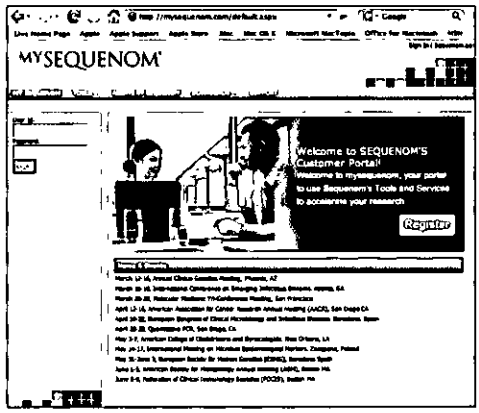
NanoDispenser RS1000

In 2007, we successfully launched the RS1000 NanoDispenser. This integrated, benchtop dispenser for nanoliter liquid handling includes a touch screen operator interface and optical dispense QC. Further improvements to the software in 2008 will make it an essential instrument for all our customers.



EpiGenomics Tools

MassARRAY EpiTYPER® technology represents a paradigm shift in quantitative DNA methylation analysis. In 2007, we compiled the Sequenom Standard EpiPanel, representing the first high resolution, fine mapping panel for epigenetic targets. Using EpiTYPER together with the EpiPanel enables a first-of-its-kind combination of fast, inexpensive, and quantitative analysis not available elsewhere. Assays for any genomic region of interest can be easily designed using Sequenom's EpiDesigner software.



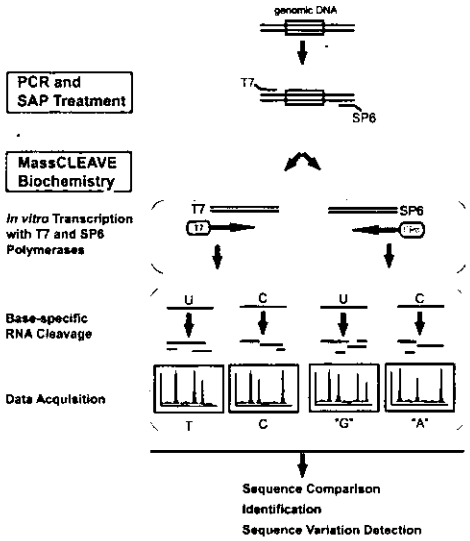
Improving Communication

In 2007 we implemented mysequenom.com, a new web-based customer portal. It allows customers to access Assays by Sequenom, as well as utilize additional tools and downloads, e-commerce capabilities and support functions. In an effort to facilitate communication and portray an image consistent with cutting edge genomic technology, we also introduced our new web site. It has already received twice as many customer visits as this time last year.

Looking forward: 2008

iSEQ

iSEQ is a new MassARRAY application for automated comparative sequence analysis. It is a highly accurate, reproducible method for identifying and typing microbes and viruses. iSEQ will launch in June 2008, heralding our presence in the microbiology field.



CNV Solutions

MassARRAY enables highly accurate quantification of copy number variant (CNV) regions, a current focus of intense investigation. Genome-wide studies are being undertaken to examine the roles CNVs play in population diversity and genotypic response to disease. These will require validation using independent methods, underscoring the utility of our platform.

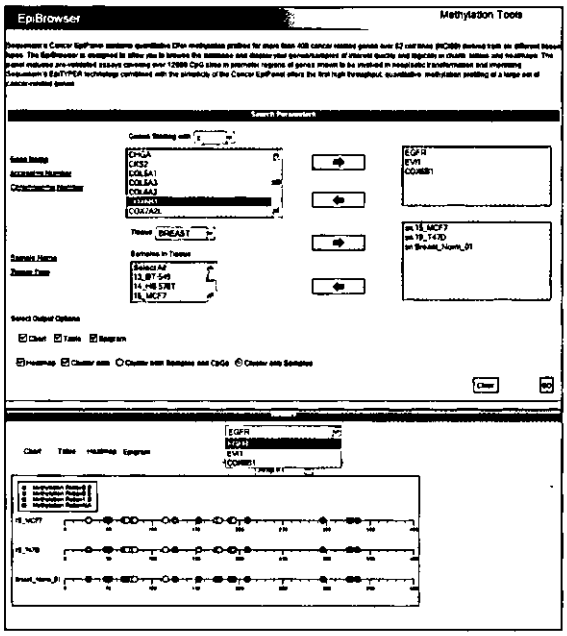
Oncopanel

The Sequenom Oncomutation panel will enable the scientific community to readily access a number of pre-designed, pre-validated mutations commonly found in tumors. This unique panel will facilitate rapid, accurate, and highly sensitive detection for profiling tumors against well-documented oncogenes.

> “In our laboratory, we use the MassARRAY identification system in several projects. This technology serves as a basis for developing new methods for rapid genotyping of hepatitis B and C viruses and quasispecies analysis of the hepatitis C virus. Currently, a new project is underway to adapt the MassARRRAY system to sequencing of whole genomes of hepatitis A and B viruses.”
>
> [illegible]
> Biochemistry, Division of Viral Hepatitis,
> Centers for Disease Control and Prevention, [illegible]

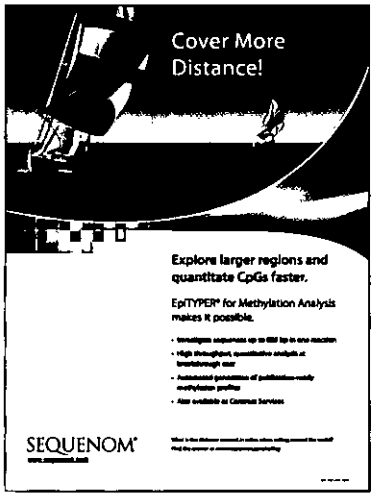
Cancer EpiPanel

The Cancer EpiPanel, contains quantitative DNA methylation profiles and assay information for more than 400 cancer related genes. The Cancer EpiPanel is designed for use with EpiTYPER technology, and offers the first high throughput, quantitative, methylation profiling tool for a large set of cancer-related genes.



Next Generation Sequencing

Nanopore-based single molecule readout technology will enable ultra-high throughput DNA analysis such as sequencing, genotyping, RNA, and epigenetic analysis on a whole-genome scale. Developing this technology will significantly contribute to the personalized medicine revolution.



The Dawn of a New Technology

Awakening Growth Through Innovation

Noninvasive Prenatal Diagnostics

Sequenom has exclusively licensed intellectual property rights to develop noninvasive prenatal genetic tests using the MassARRAY system and other platforms. The MassARRAY system delivers reliable and specific data from genetic target material that is only available in trace amounts.

Our research and development team, in collaboration with the world's leading experts in genetic medicine, are working on noninvasive prenatal genetic tests using "SEQureDx™" technology. SEQureDX technology aims to provide accurate information to women, their physicians, and genetic counselors. We anticipate that SEQureDx technology will be utilized early in pregnancy, reduce the need for amniocentesis, and contribute to the care and prevention of birth defects.

SEQureDx is based on the work of Professor Dennis Lo, and analyzes circulating fetal nucleic acid from maternal blood. The technology has particular promise for new, noninvasive tests for fetal gene and chromosome abnormalities such as RHD, fetal sex determination and Trisomy – including Trisomy 21. Through key partnerships with genetic testing laboratories, our first test for fetal RHD was made available in 2007.

In 2008, we anticipate initiating key clinical studies to validate noninvasive fetal markers for pregnan-

cies at risk of X-linked and gender related disorders such as Congenital Adrenal Hyperplasia (CAH) and population based screening methods for aneuploidies, specifically Down syndrome.

Compared to testing intact fetal cells isolated from maternal blood, there are significant advantages to testing cff DNA. First, there appears to be "enough" cff DNA in pregnancy to develop prenatal diagnostic tests that generate results for routine testing. Second, the turnover of cff DNA is quite rapid. Rapid a turnover means that a given fetal DNA measurement is unlikely to interfere with subsequent pregnancies, and offers a "real-time" picture of the genetic health of the fetus. Finally, cff DNA is reported to be routinely detected at 12 weeks pregnancy, with some groups reporting routine detection at 5 weeks gestation. These unique characteristics of cff DNA provide promise of rapid, reliable and reproducible prenatal tests that can be easily carried out for a large number of samples.

Most recently, Dennis Lo's research group established a new approach of analyzing placentally derived RNA transcripts. A significant advantage of looking at RNA is that all genes are not switched on in all tissues. By looking at genes that are only switched on in the placenta — a fetal specific organ — the RNA is 100% specific to the fetus. Sequenom is expanding this research to identify sufficient fetal RNA markers to address routine Trisomy testing with broad ethnic coverage, and more than 95% sensitivity and close to 99% specificity.

The full diagnostic application of cff nucleic acids are yet to be realized. Sequenom is committed to developing methods to improve fetal DNA extraction, fetal marker identification, and making prenatal tests available to ALL women that desire prenatal genetic testing to improve pregnancy outcome.

> "In the near future, non-invasive methods using fetal nucleic acids circulating in the mother's blood stream will dramatically improve the way patients undergo prenatal screening and, ultimately, diagnosis."
>
> **Dr. Allan Bombard, M.D.**
> Chief Medical Officer at Sharp Mary Birch Hospital for Women and Chair of Sequenom's Clinical Advisory Board, San Diego

As stated by Dr. Allan Bombard, Chief Medical Officer at Sharp Mary Birch Hospital for Women and Chair of Sequenom's Clinical Advisory Board, "In the near future, noninvasive methods using fetal nucleic acids circulating in the mother's blood stream will dramatically improve the way patients undergo prenatal screening and, ultimately, diagnosis. To ensure that the values and policies that impact prenatal healthcare are thoughtfully considered and implemented, Sequenom recently established a Clinical Advisory Board comprised of medical leaders, public policy experts, and ethical thought leaders in the field of medical genetics and maternal-fetal medicine. Our Clinical Advisory Board will help drive the goal to develop safe and accurate prenatal testing for all pregnant women."

International Expansion

Reaching New Markets and Providing Costumer Support

As our customer base is expanding, it is important to continuously adapt to their needs and provide appropriate support. To meet those goals we have now opened offices in India, China and Japan.

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTIONS 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2007

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to .

Commission File Number: 000-29101

SEQUENOM, INC.

(Exact name of Registrant as specified in its charter)

DELAWARE	**77-0365889**
(State or other jurisdiction or incorporation or organization)	**(I.R.S. Employer Identification No.)**
3595 John Hopkins Court San Diego, California	**92121**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (858) 202-9000

Securities registered pursuant to Section 12(b) of the Act:

Common Stock, $.001 par value
(Title of class)

The Nasdaq Stock Market, LLC
(Name of Each Exchange on Which Registered)

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (check one):

Large accelerated filer ☐	Accelerated filer ☒	Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company filer ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of the voting stock held by non-affiliates of the registrant, based upon the closing sale price of the Common Stock on June 30, 2007 as reported on the Nasdaq Global Market, was approximately $180.7 million. Shares of Common Stock held by each executive officer and director and by each person who owns 10% or more of the outstanding Common Stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of March 3, 2008, there were 45,403,927 shares of the registrant's Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Part III incorporates by reference information from the registrant's definitive proxy statement to be filed with the Securities and Exchange Commission in connection with the solicitation of proxies for the registrant's annual meeting of stockholders to be held on May 29, 2008.

SEQUENOM, Inc.
FORM 10-K
For the Fiscal Year Ended December 31, 2007
Index

PART I

Item 1. BUSINESS

All statements in this report that are not historical are forward-looking statements within the meaning of Section 21E of the Securities Exchange Act. These forward-looking statements can generally be identified as such because the context of the statement will include words such as "may," "will," "intend," "plans," "believes," "anticipates," "expects," "estimates," "predicts," "potential," "continue," "opportunity," "goals," or "should," the negative of these words or words of similar import. Similarly, statements that describe our future plans, strategies, intentions, expectations, objectives, goals or prospects are also forward-looking statements. These forward-looking statements are or will be, as applicable, based largely on our expectations and projections about future events and future trends affecting our business, and so are or will be, as applicable, subject to risks and uncertainties including but not limited to the risk factors discussed in this report, that could cause actual results to differ materially from those anticipated in the forward-looking statements. We caution investors that there can be no assurance that actual results or business conditions will not differ materially from those projected or suggested in such forward-looking statements. Our views and the events, conditions and circumstances on which these future forward-looking statements are based, may change. All forward statements are qualified in their entirety by this cautionary statement and we undertake no obligation to revise or update any such statements to reflect events or circumstances after the date hereof.

SEQUENOM®, SpectroCHIP®, iPLEX® and MassARRAY® are registered trademarks and EpiTYPER™, SEQureDx™ and iSEQ™ are trademarks of SEQUENOM, Inc. This report may also refer to trade names and trademarks of other organizations.

Sequenom was incorporated in 1994 under the laws of the State of Delaware.

Overview

We are a genetics and molecular diagnostic company providing genetic analysis products and services and developing diagnostic tests initially targeted at non-invasive prenatal genetic disorders. Our genetic analysis business provides applications that translate genomic science into solutions for biomedical research, agricultural and molecular medicine applications.

Genetic Analysis

Our proprietary MassARRAY system, comprised of hardware, software applications, consumable chips and reagents, is a high performance nucleic acid analysis platform that quantitatively and precisely measures genetic target material and variations. Our genetic services business provides genetic analysis services to customers as a complement and as an alternative to our systems product offerings and assists in developing and expanding our genetic analysis products. Our research and development efforts are committed to producing new and improved components and applications for our MassARRAY system that will deliver greater system versatility and also reduce the cost per data point generated.

We derive revenue primarily from sales of our MassARRAY hardware, software and consumable products. Our standard MassARRAY system combines four basic components:

- proprietary analytical reaction technology and sample preparation and dispensing hardware to prepare DNA for analysis;
- a coated silicon chip known as the SpectroCHIP bioarray;
- a mass spectrometer, which uses an established analytical method that we have adapted for DNA analysis; and
- bioinformatics software that records, calculates, and reports the data generated by the mass spectrometer.

Our MassARRAY technology is accepted as a leading high-performance DNA analysis system for the fine mapping genotyping market. Our customers include clinical research laboratories, biotechnology companies, academic institutions and government agencies. To maximize market penetration and provide customer support for our expanding user base, we have established direct sales and support personnel serving North America, Europe, India, Japan and other regions of Asia, in addition to regional distribution partners in France, Israel, South Korea, New Zealand, Singapore, Taiwan, and Turkey.

Genetic analysis highlights in 2007 include:

- In January 2007, the Genome Institute of Singapore significantly expanded its nucleic acid analysis capabilities for fine mapping by upgrading its genetic analysis facility to include two new MassARRAY systems with application software packages for running our iPLEX Gold genotyping assay and our EpiTYPER assay;
- In March 2007, results of an independent study published in Nature Genetics revealed that the sensitivity of MassARRAY technology genotyping is consistent with prior genetic-association studies using pooled DNA samples and that MassARRAY technology may exceed the gold standard of Sanger sequencing for mutations profiling in tumor specimens;
- In May 2007, we reported an agreement to provide quantitative gene expression (QGE) services to the Immune Tolerance Network, a highly-respected international collaboration of researchers who conduct clinical research of new immune-tolerance therapies;
- In June 2007, we announced an alliance with SensiGen LLC to develop and commercialize an ultra-sensitive human papillomavirus test and other advanced proprietary diagnostics;
- In September 2007, we launched MassARRAY TYPER 4.0 genotyping software and the Assays-By-Sequenom service;
- In September 2007, we announced plans to develop third-generation nanopore-based single-molecule sequencing technology licensed from Harvard University with the potential to provide a commercially viable, rapid-sequencing genotyping, methylation and gene expression solution;
- During 2007 we opened direct offices in India and Japan, and expect further international expansion in 2008.

Products and Applications

Our MassARRAY system provides reliable results for numerous types of DNA analysis applications including SNP genotyping and allelotyping, quantitative gene expression analysis, quantitative methylation marker analysis, SNP discovery, and oligonucleotide quality control. While the MassARRAY system is versatile, it has also became a cost-effective genotyping solution for customer needs with the launch of the iPLEX Gold assay which reduced cost per genotype to about 3 ½ cent per data point for a typical study. The iPLEX Gold assay is a proprietary assay, which provides for multiplexed DNA sample analysis that in turn provides cost-effectiveness by allowing the user to perform multiple sample genotyping analyses using a similar amount of reagents and chip surface area as used for a single DNA sample analysis. Customers purchase the iPLEX Gold assay capability in the form of a software upgrade to the MassARRAY system and through the purchase of consumable chip and reagent kits.

Biomedical Research Market

Our MassARRAY systems are used in numerous academic, pharmaceutical, and clinical research institutions in the biomedical research market to identify genetic markers with clinical utility. Our products are cost competitive and desirable for the fine mapping genotyping sector of the biomedical research market. Institutions conducting fine mapping genotyping studies use the MassARRAY system to perform candidate gene

and candidate region association studies. These studies typically analyze up to several thousand single nucleotide polymorphisms (SNPs) with thousands of samples. Customers conduct candidate region associations to narrow down regions of interest where previous linkage studies have correlated disease phenotypes to specific regions on the chromosome. Candidate gene association studies demonstrate for specific patient samples that underlying genetic defects reside in specific biological pathways. From there, biomarker discovery efforts can potentially lead to clinical validation and use.

Candidate gene and candidate region association studies typically follow whole-genome population genetics studies, whole genome association studies, and linkage studies. Whole-genome population studies are conducted for general research purposes to create SNP maps and to determine allelic frequencies in different ethnicities and species. Whole genome association studies and linkage studies are conducted for genetic discovery purposes. In general, these studies are high throughput studies that analyze a small number of samples against a high number of SNPs. Once target regions are identified and connections to disease are made, these institutions then typically perform fine mapping genotyping studies, which are conducted in an effort to apply genetics to diseases.

Agricultural Market

Widespread livestock testing is partly being driven by government mandate. With growing requests for farm-of-origin verification, country-of-origin verification, age-verification, and national ID programs, the market for traceability analysis is expanding. These programs rely upon accurate traceability analysis for their success. The MassARRAY platform is widely recognized as one of the most accurate and cost effective platforms for providing traceability testing in this context. Additionally, there is market demand for genetic testing as it relates to trait selection and feedlot management. There is also growing demand for genetic analysis of crops, including maize, rice, and others for potentially growing agricultural products with enhanced traits, such as nutritional quality, disease resistance, and crop yields.

Our MassARRAY platform is becoming widely accepted by livestock-focused service providers in the United States and Europe for genotyping, due to its suitability for routine testing of a large number of DNA samples with modest numbers of SNPs. Beginning with our first MassARRAY system placement with the U.S. Department of Agriculture in 1999, we have provided genotyping solutions for livestock customers. We serve the livestock market through product sales, panel development and optimization, and providing services, including back-up testing, over-flow, and quality control. Our competitive advantage in the livestock market is based upon the capability of the MassARRAY system to perform high-volume routine testing. While other platform companies have been successful in the whole genome mapping segment of the market, utilizing tens of thousands of SNPs, their platforms are not as optimal for routine tests utilizing tens to hundreds of SNPs.

Molecular Diagnostics

We are developing various molecular diagnostic tests in prenatal genetic disorders, oncology and infectious diseases. We have branded our diagnostic technology, including prenatal diagnostics, under the name SEQureDx. We have in-licensed exclusive rights to use free fetal nucleic acids for diagnostic testing from maternal serum or plasma to ascertain various genetic disorders, including gender determination through an agreement with Isis Innovation Ltd. Our exclusive license rights cover the general diagnostic use of fetal nucleic acids derived from maternal plasma or serum in territories including the United States, Europe, Australia, Canada, Hong Kong and Japan as well as non-exclusive rights in China, to non-invasive prenatal diagnostic intellectual property from The Chinese University of Hong Kong. Our exclusively licensed patent portfolio includes the general use, on any technology platform, of fetal nucleic acids derived from maternal plasma, serum and in some cases blood for non-invasive prenatal genetic diagnostic testing, including genetic, expression and epigenetic-based assays and tests. Diagnostic tests based on our foundational intellectual property, which is disease independent, could be developed, provided certain technical challenges are overcome, for cystic fibrosis, Tay Sachs, hemoglobinopathies (sickle cell anemia and the thalassemias), Rhesus D, gender determination for x-linked disorders, and chromosomal aneuploidies (such as Down Syndrome), and others, on any platform including mass spectrometry and real time polymerase chain reaction (RT-PCR) amplification platforms.

Molecular diagnostics highlights in 2007 and early 2008 included:

- In January 2007, we entered into a strategic collaboration with Qiagen N.V. to jointly develop a gold-standard preanalytical solution for fetal DNA enrichment for prenatal diagnostics;
- In February 2007, we further expanded our noninvasive prenatal diagnostic intellectual property portfolio by acquiring additional rights from the Chinese University of Hong Kong;
- In May 2007, we reported that our noninvasive fetal RhD genotyping assay using our MassARRAY technology demonstrated 100% concordance with routine European noninvasive RT-PCR methods for RhD;
- In December 2007, we announced our commercial partner's receipt of New York State approval for its RhD incompatibility test as a laboratory developed test (LDT) using RT PCR methodology, the first noninvasive prenatal test based on our SEQureDx Technology;
- In January 2008, we announced that San Diego-based Sharp HealthCare was cleared to commence patient enrollment in a screening study to clinically assess our noninvasive SEQureDx Technology for the detection of fetal aneuploidy, including Down syndrome;
- Also in January 2008, we announced our intention to conduct a multi-center fetal RhD study at centers affiliated with the North American Fetal Therapy Network (NAFTNet) using our MassARRAY System and SEQureDx Technology.

Our collaboration with Qiagen, announced in January 2007, is focused on the joint development of a gold-standard preanalytical solution for small molecule (fetal) DNA enrichment for prenatal diagnostics. We have exclusive global commercialization rights to products that may be derived from this collaboration. If developed, this solution is expected to play an integral part in our further development and commercialization of diagnostic tests in the field of non-invasive prenatal diagnostics.

We are in the process of developing non-invasive prenatal nucleic acid based tests using fetal DNA or RNA applications for Downs syndrome, Rhesus D, x-linked disorders and gender determination that may provide more fundamental and reliable diagnostic information earlier in pregnancy. In January 2007, as part of our platform independent commercialization strategy, we announced our first commercial partnership with Lenetix Medical Screening Laboratory, Inc. who has now developed a CLIA validated test for Rhesus D blood incompatibility using real time polymerase chain reaction amplification (the "Lenetix Agreement").

Under the Lenetix Agreement, we each licensed to the other on a non-exclusive and royalty-free basis, rights to certain intellectual property for purposes of conducting the study and research plan contemplated by the collaboration. We also granted to Lenetix a non-exclusive, non-sublicensable and royalty-bearing commercial license during the term of the Lenetix Agreement which permits Lenetix to sell tests developed under the Lenetix Agreement throughout the United States in exchange for royalties payable to us on sales of such tests. We also entered into cross-licensing arrangements with respect to improvements on each party's respective intellectual property. We also have an option to exclusively license on a royalty-bearing basis any improvement or modification made by Lenetix or by us to Lenetix's background intellectual property in connection with the study or implementation of the research plan.

Pursuant to the Lenetix Agreement, Lenetix is responsible for conducting the research contemplated by the collaboration and maintaining all research documentation to support any submissions made to the United States Food and Drug Administration (the "FDA"). We have agreed to reimburse certain expenses to be incurred by Lenetix in connection with the collaboration and we remain responsible for preparing and submitting any documents to the FDA pertaining to any tests or products developed under the Lenetix Agreement.

The Lenetix Agreement terminates upon the earliest of (i) three years from the date of the first commercial sale by Lenetix of a test developed under the Lenetix Agreement, (ii) January 24, 2011, (iii) thirty days after

written notice by the Registrant if Lenetix does not achieve the first commercial sale of a test developed under the Lenetix Agreement by a specified date or fails to maintain minimum annual test sales, or (iv) written notice by either party for material breach of the Lenetix Agreement by the other party if such breach has not been cured within 60 days of notice of breach to such party.

In December 2007, Lenetix received New York State approval of a non-invasive prenatal laboratory developed test (LDT) performed on a real-time PCR (RT-PCR) platform to detect Rhesus D (RhD) incompatibility, based on our technology licensed and the work performed under the Lenetix Agreement. Commercial sales of the test by Lenetix commenced in January 2008.

In October 2005, and as amended thereafter, we entered into an agreement ("Agreement") with ISIS Innovation Limited ("ISIS"), a wholly owned subsidiary of the University of Oxford (the "University"), pursuant to which ISIS granted us an exclusive royalty-bearing license in the United States, Canada, France, Germany, Great Britain and other countries in Europe, to develop, use and market products covered by the patent claims licensed under the Agreement ("Licensed Products"), except for the field of Rhesus D blood typing by real time polymerase chain reaction amplification platforms in Europe. The licensed technology, including improvements made by the inventors prior to the Agreement, covers non-invasive prenatal genetic diagnostic testing on fetal nucleic acids.

In October 2006 we entered into an amendment to the Agreement pursuant to which, in exchange for an upfront payment by us and entitlement to milestone and royalty payments, ISIS granted us an expanded exclusive license including the field of prenatal gender determination for social or lifestyle purposes and an expanded territory for the field of gender determination for social or lifestyle purposes including Japan and Australia. In November 2007, we entered into a second amendment to the Agreement pursuant to which, in exchange for an upfront payment by us, a right to a milestone fee upon completion of a specified event, and royalty payments on sales, ISIS granted us an expanded licensed territory to include Japan, Australia, and Hong Kong, excluding in the case of Hong Kong the field of gender determination for social or lifestyle purposes.

We also have an exclusive option to negotiate a further license of any improvements made by the inventors. Subject to the license rights granted under the Agreement, intellectual property rights created in connection with improvements made to the licensed technology will belong to the party developing the improvements. We also granted to ISIS a perpetual royalty-free license to the University to use and publish material relating to the licensed technology and any of our improvements solely for non-commercial use. The University's right to publish is subject to our right to delay publication of information to protect the licensed technology or our improvements.

We have agreed to make up-front payments to ISIS and pay to ISIS royalties on net sales of Licensed Products, including specified minimum royalty amounts, and milestone payments upon commercial events with respect to Licensed Products for particular indications.

The Agreement will remain in force for the life of any patent issued in connection with the patent application covering the licensed technology, subject to earlier termination by either party upon uncured material breach or other specified circumstances. ISIS may terminate the Agreement if we file a petition to wind-up or dissolve or upon 30 days written notice if we were to challenge the validity of the patent rights covering the licensed technology or fail to make the up-front payments as provided in the Agreement. After the third anniversary of the Agreement, we may terminate the Agreement for any reason with six months advance written notice. In the event we fail to achieve certain milestone requirements with respect to particular indications, ISIS may convert the exclusive license into a non-exclusive license with respect to those indications.

Strategic Direction

Our strategy focuses on leveraging our technology, intellectual property, and other assets to expand in primarily the fine mapping segment of the genetic analysis market, and capitalizing on our potential in molecular

diagnostics markets. In our core genetic analysis business, we are focusing on prioritizing key product and service initiatives that we believe will drive growth and create value. Our focus in molecular diagnostics is to focus our immediate attention on developing and commercializing various non-invasive prenatal diagnostic tests and to develop tests in other women's health disorders and disease areas, including oncology. In addition to the internal development of diagnostic tests for non-invasive prenatal diagnostics, we are pursuing partnering opportunities for the development and commercialization, and the adaptation of the MassARRAY system for molecular diagnostics in general.

Sequenom's strategy includes the following:

- Focusing on meeting customer needs in the fine mapping segment of the genetic analysis market and adding additional pharmaceutical, biotechnology, agricultural, and molecular diagnostic companies to our research customer base;
- Creating a sustainable competitive advantage by launching improvements and new applications that significantly reduce cost per data point, for genotyping, quantitative gene expression and methylation pattern analysis and a new application for pathogen typing, under the brand iSEQ;
- Adapting the MassARRAY platform for use in molecular diagnostics, potentially including development of in-vitro diagnostic solutions;
- Developing and commercializing, through partnerships and forward integration, non-invasive prenatal diagnostic assays and other proprietary tests and biomarkers.

Intellectual Property

To establish and protect our proprietary technologies and products, we rely on a combination of patent, copyright, trademark and trade secret laws, as well as confidentiality provisions in our contracts.

We have implemented a diligent patent strategy, including in-licensing, designed to facilitate our research and development and commercialization of current and future products. Our patent portfolio, including in-licensed patent rights, includes 302 issued patents and 216 pending patent applications, in the United States and other major industrial nations throughout the world.

The majority of our issued United States patents pertaining to mass spectrometry-based nucleic acid analysis methods and technology will expire between 2013 and 2017. United States Patent Nos. 6,500,621, 6,300,076, 6,258,538, and 5,869,242 and European Patent No. EP 0815261 each claim nucleic acid analysis by mass spectrometry methods, including methods that may be performed using our MassARRAY system. Each of these patents expires in 2015.

Most of our genetically based disease association inventions are the subject of pending patent applications, including provisional patent applications. These patent applications are in the early stages of patent prosecution and it is difficult to predict when patents will issue, if at all.

Our prenatal diagnostic patent portfolio includes numerous in-licensed issued patents and in-licensed pending patent applications. The issued patents include United States Patent Nos. 6,250,540, 6,927,028, and 6,664,056, and foreign equivalents for portions of the portfolio that include Canada and Europe. These patents will expire between 2017 and 2022. Most of the in-licensed patent applications are in the early stages of patent prosecution and it is difficult to predict when patents will issue from those applications, if at all. These patents and patent applications cover methods of analyzing fetal alleles in maternal serum or plasma, methods of analyzing the methylation status of fetal nucleic acid to differentiate it from maternal nucleic acid, and various DNA and RNA markers which may be useful in detecting and diagnosing various fetal disorders, such as Down Syndrome or maternal disorders, such as preeclampsia. We in-license United States Patent No. 6,250,540 and its foreign equivalents from Isis Innovation, Ltd. in the United Kingdom. The European counterpart patent to U.S.

Patent No. 6,250,540 is European Patent No. 994963. The 994963 Patent was the subject of an Opposition proceeding in the European Patent Office (the "EPO"), which was brought against Isis Innovation, Ltd. by Ravgen, Inc. The Opposition concluded with the EPO's decision to affirm the grant of the European 994963 Patent, however, with amended claims consistent with the issued claims of its counterpart United States Patent. Ravgen has appealed the EPO's decision (Appeal No. T146/07-334) and the appeal is currently pending before the EPO.

Our success depends to a significant degree upon our ability to continue to develop proprietary products and technologies, to identify and validate useful genetic markers and to thoroughly understand their associations with disease, and to in-license desirable or necessary intellectual property as appropriate. We intend to continue to file patent applications as we develop new products and methods for nucleic acid analysis, and as we develop diagnostic and molecular medicine related technology and products. Patents provide some degree of protection for our intellectual property. However, the assertion of patent protection involves complex legal and factual determinations and is therefore uncertain. The laws governing patentability and the scope of patent coverage continue to evolve, particularly in the areas of genetics, molecular biology, and prenatal and molecular diagnostics that are of interest to us. There can be no assurance that patents will issue from any of our patent applications. The scope of any of our issued patents may not be sufficiently broad to offer meaningful protection.

Our issued patents may be successfully challenged, invalidated, circumvented or declared unenforceable so that our patent rights would not create an effective competitive barrier. The laws of some foreign countries may not permit such assignments or may not protect our proprietary rights to the same extent, as do the laws of the United States. In view of these factors, our intellectual property positions bear some degree of uncertainty.

We also rely in part on trade secret protection and confidentiality agreements for protection of our intellectual property. We attempt to protect our trade secrets and confidential information by entering into confidentiality agreements with outside parties and with our employees and consultants. Our employees also sign agreements requiring that they assign to us their intellectual property interests in work performed for us as a part of their employment. The laws of some foreign countries may not permit such assignments or may not protect our proprietary rights to the same extent, as do the laws of the United States. All employees sign an agreement not to compete unfairly with us during their employment and upon termination of their employment, through the misuse of confidential information, soliciting employees, soliciting customers, and the like. It is possible that these agreements may be breached or invalidated and if so, there may not be an adequate corrective remedy available. Parties may breach the confidentiality provisions in our contracts or infringe or misappropriate our patents, copyrights, trademarks, trade secrets, confidential information, and other proprietary rights. Outside parties may independently discover or invent competing technologies or reverse engineer our trade secrets or other technology. The measures we are taking to protect our proprietary rights may not be adequate due to factors beyond our control.

In the future, parties may file claims asserting that our technologies or products infringe on their intellectual property. We cannot predict whether parties will assert such claims against us, or whether those claims will harm our business. If we are forced to defend against such claims, we will face costly litigation and diversion of management's attention and resources. As a result of such disputes, we may have to develop costly non-infringing technology or enter into licensing agreements. These agreements, if necessary, may be unavailable on terms acceptable to us, which could seriously harm our business and financial condition.

Competition

We face competition from various companies offering nucleic acid analysis systems and services and various companies developing and commercializing diagnostic assays, and various companies researching and developing prenatal diagnostic technology.

In the nucleic acid analysis marketplace, our MassARRAY system competes with alternative technology platforms that differ in cost per datapoint, throughput, sample amplification, analysis process, sample separation

or method of DNA detection, turnaround time and quality of results. Most competitive technologies do not rely on direct detection methods, such as mass spectrometry, but instead use indirect sample detection methods, such as hybridization and/or labeling. Such technologies are offered by: Applied Biosystems, Beckman Coulter, Inc., Illumina, Inc., Biotage AB, and others.

In the molecular diagnostic business, including the non-invasive prenatal diagnostic market, we plan to develop diagnostic research use tests based on the use of free fetal DNA in maternal serum or plasma. We believe that our exclusive license to the intellectual property surrounding the use of free fetal DNA, combined with the precision and accuracy of our MassARRAY system will provide us with a competitive advantage in this space. Our competition also arises from alternative methods of non-invasive prenatal diagnostics such as: fetal DNA extraction from maternal urine, trophoblast purification from maternal blood, and trophoblast purification from cervical swabs.

Research and Development

We believe that investment in research and development is essential to establishing a long-term competitive position as a provider of genetic analysis tools and as a provider or an enabler of diagnostic tests. Our research and development expenses for the years ended December 31, 2007, 2006, and 2005, were $14.4 million, $11.9 million, $11.9 million, respectively.

During 2007 we conducted most of our research and development activities at our facilities in the United States. Our research and development is augmented by advisory and collaborative relationships with others.

Our research and development efforts are primarily focused on expanding the applications for our MassARRAY technology, research and development of diagnostic assays, and research and development of prenatal diagnostic methods and technologies, including the sample preparation step of enriching fetal nucleic acid for subsequent analysis.

Government Regulation

Regulation by governmental authorities in the United States and other countries will be a significant factor in the production and marketing of diagnostic products, including gender tests that may be developed by us or our corporate partners, collaborators or licensees. Certain diagnostic products developed by us or our collaborators may require regulatory approval by governmental agencies prior to commercialization. Products that we develop in the diagnostic markets, depending on their intended use, will be regulated as medical devices by the U.S. Food and Drug Administration (FDA) and comparable agencies of other countries and require either premarket approval, or PMA, or 510(k) clearance from the FDA prior to marketing. The 510(k) clearance pathway usually takes from three to six months from submission, but can take longer. The premarket approval pathway is much more costly, lengthy, uncertain and generally takes from six months to one year or longer from submission. The receipt and timing of regulatory approvals for the marketing of such products may have a significant effect on our future revenues. Human diagnostic products are subject to rigorous testing and other approval procedures by the FDA in the United States and similar health authorities in foreign countries. Various federal and state statutes and regulations also govern or influence the manufacturing, safety, labeling, storage, record keeping and marketing of diagnostic products.

Obtaining these approvals and the subsequent compliance with these regulations require the expenditure of substantial resources over a significant period of time, and there can be no assurance that any approvals will be granted. Any such delay in obtaining or failure to obtain such approvals could adversely affect our ability to earn sales revenues, royalties or other license-based fees. Current governmental regulations may change as a result of future legislation or administrative action and cannot be predicted.

As mentioned above, our strategy focuses on capitalizing on our potential in molecular diagnostics markets by commercializing various non-invasive diagnostic tests. Our approach involves initial commercialization, through partnering with Clinical Laboratory Improvement Amendments (CLIA) certified laboratories, of laboratory developed tests (LDTs), formerly referred to as "homebrew." Such LDT testing is currently solely under the purview of CMS and State agencies who provide oversight of the safe and effective use of LDT's. There is no FDA oversight for LDTs to date, although this could change in the future as a result of the Secretary's Advisory Committee on Genetics, Health and Science (SACGHS) report on the regulation of genetic testing. We have no current plans, however, to utilize ASR's or In Vitro Diagnostic Multivariate Index Assay (IVDMIA) in our LDT strategy so the effect on us of any such change in FDA policy is currently considered irrelevant to our business.

Our research and development activities involve the controlled use of hazardous materials and chemicals. We are subject to federal, state and local laws and regulations governing the use, storage, handling and disposal of such materials and chemicals, as well as certain waste products.

Employees

As of March 3, 2008, we employed 192 persons, of whom 36 hold Ph.D. or M.D. degrees and 50 hold other advanced degrees. Our success will depend in large part upon our ability to attract and retain employees. We face competition in this regard from other companies, research and academic institutions, government entities, and other organizations.

Executive Officers

Our executive officers, their positions with us, and their ages as of March 3, 2008 are as follows:

Name	Age	Position
Executive Officers		
Harry Stylli, Ph.D., M.B.A.	46	President, Chief Executive Officer and Director
Charles R. Cantor, Ph.D.	65	Chief Scientific Officer and Director
Elizabeth Dragon, Ph.D.	59	Senior Vice President, Research and Development
Paul Hawran	55	Chief Financial Officer
Michael Monko, M.B.A.	48	Senior Vice President, Sales and Marketing
Larry Myres	49	Vice President, Operations
Clarke Neumann, J.D.	44	Vice President and General Counsel
Steven Owings	55	Vice President of Commercial Development, Prenatal Diagnostics
Karsten Schmidt, Ph.D.	46	Vice President, Business Development
Dereck Tatman, Ph.D., M.B.A.	35	Vice President, Business Development

Harry Stylli, Ph.D., M.B.A. Dr. Stylli joined us in June 2005 as President and Chief Executive Officer and a director. From November 2004 to February 2005, Dr. Stylli served as President and Chief Executive Officer of Xencor, Inc., a privately held, next-generation antibody platform company. From May 2002 to July 2003, Dr. Stylli served as President and Chief Executive Officer for CovX Pharmaceuticals, a biopharmaceutical company that he co-founded and which was acquired by Pfizer. From 1995 to 2001, Dr. Stylli served in various capacities, including President, for Aurora Biosciences Corporation, a drug discovery systems company of which Dr. Stylli was a co-founder. Dr. Stylli currently serves as a director of Molecular Insight Pharmaceuticals, Inc., a publicly held biotechnology company, as a director of privately-held Micropharma Ltd., a Canadian neutraceuticals company, and is an advisor to Nanosyn, a privately held medicinal chemistry company. Dr. Stylli received his Ph.D. from London University's Faculty of Medicine and an M.B.A. from the United Kingdom's Open University.

Charles R. Cantor, Ph.D. Dr. Cantor joined us as Chief Scientific Officer and Chairman of the Scientific Advisory Board in August 1998. Since 1992 Dr. Cantor has served as a professor in the Department of

Biomedical Engineering and Co-Director of the Center for Advanced Biotechnology at Boston University. Prior to that time, Dr. Cantor held positions at Columbia University and the University of California, Berkeley. He was also Director of the Human Genome Center of the Department of Energy at Lawrence Berkeley Laboratory. Dr. Cantor published the first textbook on genomics, *The Science and Technology of the Human Genome Project*, and remains active in the Human Genome Project through his membership in a number of the project's advisory committees and review boards. Dr. Cantor is a member of the National Academy of Sciences. He is also a scientific advisor to 12 biotech and life science companies and one venture capital firm. Dr. Cantor currently serves as a director of ExSAR, Inc., Human BioMolecular Research Institute, and Retrotrope, Inc. Dr. Cantor received his Ph.D. in Chemistry from the University of California, Berkeley.

Elizabeth Dragon, Ph.D. Dr. Dragon joined us as Senior Vice President of Research and Development in May 2006. Dr. Dragon has over 25 years of diagnostics research and development, management, and leadership experience, including significant product development and commercialization planning and execution achievements during her tenure at Roche Molecular Systems from 1990 to May 2006. At Roche, Dr. Dragon held many leadership roles of increasing responsibility, most recently as Senior Vice President of Global Standardization and Vice President of Diagnostics Development. She pioneered the development and commercialization of PCR-based diagnostic tests and ultimately led the global commercialization of numerous FDA-approved diagnostic products. Dr. Dragon received her Ph.D. in Virology and Cell Biology from Albert Einstein College of Medicine of Yeshiva University.

Paul W. Hawran. Mr. Hawran served as a director from August 2006 until February 2007. In February 2007, Mr. Hawran was appointed Chief Financial Officer of Sequenom effective April 1, 2007. Mr. Hawran joined Neurocrine Biosciences, Inc. as Vice President and Chief Financial Officer in 1993 and served as Executive Vice President and Chief Financial Officer since 2001 with responsibilities for strategic planning, finance, investor relations, human resources, information technologies and operations. He previously served as Vice President and Treasurer at SmithKline Beecham Corporation, as well as in various financial positions at Warner Communications, now Time Warner, Inc. Mr. Hawran is also a member of Cytori Therapeutics, Inc.'s board of directors. He received an MS in taxation from Seton Hall University and BS in finance from St. John's University. He is a member of the American Institute of Certified Public Accountants, the California and Pennsylvania Institutes of Certified Public Accountants and the Financial Executives Institute.

Michael Monko, M.B.A. Mr. Monko joined us as Senior Vice President of Sales and Marketing in August 2006. Mr. Monko has 20 years of life science sales and marketing experience. He served as Vice President of Sales for Upstate/Chemicon from 2005 to July 2006 with global sales and management responsibility for more than 100 sales, service and support employees. Previously, he served 19 years at Invitrogen Corporation with a progressive and accomplished career in sales, beginning as a representative and culminating as Senior Director, Sales Force Effectiveness. Mr. Monko received his B.S in Biochemistry from the University of New Hampshire and his M.B.A. from Babson College.

Larry Myres. Mr. Myres joined us as Vice President of Operations in November 2005. Mr. Myres has over 20 years of experience in medical device operations. Prior to joining us, Mr. Myres was Vice President of Operations for medical device companies DexCom, Inc. from 2000 to 2005 and Precision Vascular Systems from 1997 to 2000. He spent over ten years with Alaris Medical Systems from 1986 to 1997, most recently as Director of Operations, EAME, after transferring from Advanced Cardiovascular Systems. Mr. Myres received a Bachelor of Science in Management from Westminster College of Salt Lake City.

Clarke Neumann, J.D. Mr. Neumann has served as our Vice President & General Counsel and Assistant Secretary since 2001. Mr. Neumann joined us in 1999 as Corporate Counsel. Prior to joining us, Mr. Neumann was an attorney at Lyon & Lyon, LLP, specializing in intellectual property litigation, strategic counseling, business litigation and transactional matters. Before his legal career, Mr. Neumann was employed as a sales representative for Nalco Chemical Company and as an engineer for McDonnnell Douglas Astronautics Corporation. Mr. Neumann holds a J.D. from Loyola Law School, Los Angeles, and a B.S. in Chemical Engineering from Pennsylvania State University.

Steven Owings. Mr. Owings has served as our Vice President of Commercial Development, Prenatal Diagnostics since February 2007. From 2004 to 2006, Mr. Owings served as President, North America, of Primagen Inc., a privately held molecular diagnostics company, where he developed licensing agreements with major diagnostic and laboratory service organizations. From 2003 to 2004, Mr. Owings served as consultant and Director of BD to Epoch Biosciences, which was purchased by Nanogen Inc. in 2004. From 1999 to 2002, Mr. Owings served as Vice President, Sales and Marketing for Visible Genetics Inc., which was purchased by Bayer Diagnostics in 2002, where he lead the North and Latin American sales and marketing teams and was instrumental in the launch of the first fully integrated FDA-cleared genomic device for the assessment of HIV drug resistance. From 1997 to 1998, Mr. Owings was with Digene Corporation, as Vice President of Sales and Marketing, where he helped launch the first FDA-approved HPV assay into the clinical diagnostics market. Prior to that, Mr. Owings spent nearly 20 years in various managerial and sales positions at Roche Diagnostic Systems. From 1992 to 1997, as Director of the PCR Business Unit, U.S., he assisted in transitioning PCR technology from research laboratory use to commercial laboratories, hospitals and healthcare providers nationwide. Mr. Owings holds a Bachelor of Science from Northern Arizona University.

Karsten Schmidt, Ph.D. Dr. Karsten Schmidt joined us in January 1999 as Director, Business Development and was appointed Managing Director of our German subsidiary in the same year and Vice President, European Operations in 2000. Dr. Schmidt moved to the Corporate Headquarters as Vice President of Operations in 2003 with worldwide responsibility for coordination of R&D Activities, Product Development, Mass Spectrometry, Manufacturing, Quality Assurance, and Regulatory Affairs. In December 2005 Dr. Schmidt was appointed Vice President of Business Development. Before joining us, he held a senior management position at Rhône-Poulenc Rorer (now Sanofi-Aventis), Germany where he was responsible for all drug regulatory affairs activities in the asthma and allergy area. Dr. Schmidt is a trained pharmacist. He received his Ph.D. in pharmaceutical biology from the University in Bonn.

Dereck Tatman, Ph.D., M.B.A. Dr. Tatman has served as our Vice President of Business Development since July 2004. Dr. Tatman joined us in 2000 as a Business Development Analyst. Dr. Tatman has over 10 years of experience in biotechnology and start-up business development environments. Prior to joining us, Dr. Tatman was employed at Dow Agrosciences in the biotechnology business development group and consulted to high-tech and biotech start-ups assisting in business plan development and strategic positioning. Dr. Tatman holds a Ph.D. from Arizona State University and a Master's of Science in Management from Krannert School of Business at Purdue University.

Available Information

Copies of our public filings are available on our Internet website at http://www.sequenom.com as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. We will supply a copy of this annual report on Form 10-K, and any other periodic or current reports, without charge. To request a copy, please contact Investor Relations, SEQUENOM, Inc., 3595 John Hopkins Court, San Diego, CA, 92121, USA.

Item 1A. RISK FACTORS

The following is a summary of many of the risks we face in our business. You should carefully read these risks and uncertainties in evaluating our business.

We may need additional capital to support our growth, which will result in additional dilution to our stockholders.

Our business may require additional investment that we have not yet secured. As of December 31, 2007, we have available cash, cash equivalents and short-term investments of approximately $50.8 million. In April 2007,

we closed a $20.0 million registered direct offering of our common stock resulting in aggregate net proceeds of $18.3 million, after deducting placement agents' fees and transaction expenses. In October 2007, we closed a private placement of our common stock for approximately $30.5 million. Under the terms of the transaction we issued and sold 3,383,335 shares at $9.00 per share, with net aggregate proceeds of approximately $28.1 million after deducting placement agents' fees and estimated transaction expenses.

We believe our cash, cash equivalents and short-term investments will be sufficient to fund our operating expenses and capital requirements through 2009. However, based upon our current plans, our business will require additional investment that we have not yet secured. The actual amount of funds that we will need will be determined by many factors, some of which are beyond our control, and we may need funds sooner than currently anticipated. These factors include but are not limited to:

- the size of our future operating losses;
- the level of our and our distributors' success in selling our MassARRAY products and services;
- the terms and conditions of sales contracts, including extended payment terms;
- our ability to introduce and sell new products and services and successfully reduce inventory levels of earlier products;
- the level of our selling, general and administrative expenses;
- the extent of our investment in diagnostic technology, including prenatal genetic analysis technology, molecular diagnostics and non-invasive prenatal diagnostic technology, development, commercialization, and regulatory approval;
- our success in and the expenses associated with researching, developing and commercializing diagnostic products, alone or in collaboration with our partners, and obtaining any required regulatory approval for those products;
- the level of our success alone or in collaboration with our partners in launching and selling any diagnostic products and services;
- the extent of our research and development pursuits, including our level of investment in MassARRAY product research and development, and diagnostic assay and other technology research and development;
- the extent to which we enter into, maintain, and derive revenues from licensing agreements, including agreements to out-license our non-invasive prenatal analysis technology, research and other collaborations, joint ventures and other business arrangements;
- the extent to which we acquire, and our success in integrating, technologies or companies;
- the level of our legal expenses including those expenses associated with litigation and with intellectual property protection;
- the level of our expenses associated with the audit of our consolidated financial statements as well as compliance with other corporate governance and regulatory developments or initiatives; and
- regulatory changes and technological developments in our markets.

General market conditions or the market price of our common stock may not support capital raising transactions such as an additional public or private offering of our common stock or other securities. In addition, our ability to raise additional capital may be dependent upon our stock being quoted on the NASDAQ Global Market or upon obtaining shareholder approval. There can be no assurance that we will be able to satisfy the criteria for continued listing on NASDAQ or that we will be able to obtain shareholder approval if it is necessary. If we are unable to obtain additional funds on a timely basis or on terms favorable to us, we may be required to cease or reduce further commercialization of our products, to cease or reduce certain research and development

projects, to sell, license or otherwise dispose of some or all of our technology or assets or business units or to merge all or a portion of our business with another entity. If we raise additional funds by selling shares of our capital stock, the ownership interest of our current stockholders will be diluted. Insufficient funds may require us to delay, scale back, or eliminate some or all of our activities.

We have limited experience.

Many of our technologies, particularly our non-invasive prenatal and other molecular diagnostic technologies, are at an early stage of discovery and development. We continue to commercialize new products and create new applications for our products. We are developing research-use-only and diagnostic applications for our MassARRAY platform and we have limited or no experience in these applications of our technology and operating in these markets. You should evaluate us in the context of the uncertainties and complexities affecting an early stage company developing products and applications for the life science industries and experiencing the challenges associated with entering into new markets that are highly competitive. We need to make significant investments to ensure our products perform properly and are cost-effective, and we or our partners will likely need to apply for and obtain certain regulatory approvals to sell our products for diagnostic applications and it is uncertain whether such approvals will be granted. Even if we develop products for commercial use and obtain all necessary regulatory approvals, we may not be able to develop products that are accepted in the genomic, diagnostic, non-invasive prenatal, clinical research, pharmaceutical, or other markets or the emerging field of molecular medicine and that can be marketed and sold successfully.

We have a history of operating losses, anticipate future losses and may never become profitable.

We have experienced significant operating losses in each period since our inception. At December 31, 2007, our accumulated deficit was approximately $482.1 million. These losses have resulted principally from expenses incurred in research and development, from selling, general, and administrative expenses associated with our operations and our significant lease obligations. We expect to incur operating losses in the future as a result of expenses associated with research and product development, production, marketing and selling, general and administrative expenses, and our significant lease obligations, as well as expenses associated with consolidating and completing the integration of any business or technology that we may acquire in the future. To achieve profitability, we would need to generate significant additional revenue with significant gross margins. It is uncertain when, if ever, we will become profitable, or cash-flow positive. Even if we were to become profitable, we might not be able to sustain or increase profitability on a quarterly or annual basis.

Our operating results may fluctuate significantly.

Our revenues and results of operations may fluctuate significantly, depending on a variety of factors, including the following:

- our ability to manage costs and expenses and effectively implement our business strategy;
- our and our distributors' success in selling, and changes in the demand for, our products and services including our MassARRAY Compact platform and iPLEX Gold multiplexing application and other applications and related consumables, and demand for products and services for genotyping, DNA methylation (epigenetic analysis) and QGE (gene expression analysis) applications;
- our success in selling genetic analysis contract research services;
- our success in depleting or reducing current product inventories in view of new or upcoming product introductions;
- the pricing of our products and services and those of our competitors;
- variations in the timing of payments from customers and collaborative partners and the recognition of these payments as revenues;

- the timing and cost of any new product or service offerings by us;
- our ability to develop new applications and products, such as non-invasive prenatal or other diagnostic assays and other diagnostic technologies, the success of such applications and products, and our ability to improve current products to increase demand for such products;
- the potential need to acquire licenses to new technology, including genetic markers that may be useful in diagnostic applications, or to use our technology in new markets, which could require us to pay unanticipated license fees and royalties in connection with licenses we may need to acquire;
- our research and development progress and how rapidly we are able to achieve technical milestones, including the milestone of sufficient fetal DNA enrichment and/or RNA based solutions with respect to our non-invasive prenatal technologies;
- the cost, quality and availability of our consumable chips, also known as SpectroCHIP bioarrays, oligonucleotides, DNA samples, tissue samples, reagents and related components and technologies;
- material developments in our customer and supplier relationships including our ability to successfully transition to new technologies to successfully maintain our relationships with our customers and suppliers;
- our ability to clinically validate any potential non-invasive prenatal or other diagnostic related products and obtain regulatory approval of any potential products; and
- expenses related to, and the results of, any litigation or other legal proceedings.

Further, our revenues and operating results are difficult to predict because they depend on the number, timing, and type of MassARRAY system placements that we make during the year, the number, timing, and types of software licensed or sold, and the quantity and timing of consumables sales for the installed base of systems and the number, timing and type of contract research services agreements that we enter into. Changes in the relative mix of our MassARRAY system and consumables sales and service agreements can have a significant impact on our gross margin, as consumable sales and service agreements typically have margins significantly different than MassARRAY system sales. Our revenues and operating results are also difficult to predict because they depend upon the activities of our distributors. The absence of or delay in generating revenues could cause significant variations in our operating results from year to year and could result in increased operating losses. Although we plan to invest substantial capital toward developing non-invasive prenatal and other diagnostic assays during 2008, we do not expect significant revenues from our diagnostic related initiatives during 2008.

We believe that period-to-period comparisons of our financial results will not necessarily be meaningful. You should not rely on these comparisons as an indication of our future performance. If our operating results in any future period fall below the expectations of securities analysts and investors, our stock price will likely fall.

We have a history of generating a large percentage of our revenue at the end of each quarterly accounting period.

Due to the manner in which many customers in our target markets allocate and spend their budgeted funds for acquisition of our products, a large percentage of our sales are booked at the end of each quarterly accounting period. Because of this timing of our sales, we may not be able to reliably predict order volumes and our quarterly revenues. A sales delay of only a few days may significantly impact our quarter-to-quarter comparisons. If our quarterly revenues fall below the expectations of securities analysts and investors, our stock price may decline. Similarly, if we are unable to ship our customer orders on time, or if extended payment terms are required, there could be a material adverse effect on revenues for a given quarter.

A reduction in revenues from sales of MassARRAY products would harm our business.

The demand for MassARRAY systems and consumables and contract research services has changed over time, and any decline in demand will reduce our total revenues. We expect that sales of MassARRAY systems and consumables will account for most of our total revenues for the foreseeable future. Also, our competitors have offered low priced fee-for-service genotyping services and technologies to the DNA analysis marketplace. These factors and the following factors, among others, would reduce the demand for MassARRAY products and services:

- competition from other products and service providers or failure of our products or applications or services;
- changes in fiscal policies and the economy which negatively impact customer buying decisions; and
- negative publicity or evaluations, particularly with respect to product warranty and repair and troubleshooting services provided to existing customers and with respect to our license rights to perform gender testing for social or lifestyle purposes.

Our revenues are subject to the risks faced by biotechnology and diagnostic companies, pharmaceutical companies, and governmental and other research institutions.

We expect that our revenues in the foreseeable future will be derived primarily from MassARRAY system products provided to academic institutions, biotechnology, diagnostic, and pharmaceutical companies, laboratories, companies and institutions that service the livestock industry, and governmental and other research institutions. Our operating results could fluctuate substantially due to reductions and delays in research and development expenditures by these customers. These reductions and delays could result from factors such as:

- changes in economic conditions and possible country-based boycotts;
- changes in government programs that provide funding;
- changes in the regulatory environment affecting health care and health care providers, and for example, recent draft FDA guidance which, if effected, may impose additional restrictions on CLIA licensed laboratories performing laboratory diagnostic tests;
- pricing pressures and reimbursement policies;
- market-driven pressures on companies to consolidate and reduce costs;
- other factors affecting research and development spending; and
- uncertainty about our ability to fund operations and supply products and services to customers.

None of these factors are within our control. We have broadened the markets to which we sell our products and applications and continue to develop new applications and products for use in new markets. We are targeting customers in clinical research and clinical marker validation, the emerging field of molecular medicine, genetic service laboratories, and animal testing laboratories and diagnostic testing markets. We have limited or no experience operating in these potential markets and, as a result, may be unable to develop products and applications that allow us to penetrate these markets or successfully generate any revenue from sales in these markets. We will have limited ability to forecast future demand for our existing and any new products and applications in these markets.

We depend on sales of our consumable chips and other MassARRAY consumables for a significant portion of our revenues.

Sales of our consumable chips and other consumables for the MassARRAY system are an important source of revenue. Revenues from MassARRAY consumables totaled approximately 40% of our total revenues for the

year ended December 31, 2007, compared to 45% of our total revenues for the year ended December 31, 2006, Factors which may limit the use of our consumable chips and other consumables or otherwise adversely affect our revenues from consumables include:

- the extent of our customers' level of utilization of their MassARRAY systems;
- our ability to provide timely repair services and our ability to secure replacement parts, such as lasers, for our MassARRAY systems;
- the extent to which customers increase multiplexing levels using the iPLEX Gold application;
- failure to sell additional MassARRAY systems;
- the termination of contracts with or adverse developments in our relations with suppliers of our consumables;
- the training of customer personnel;
- the acceptance of our technology by our customers;
- the ability to maintain necessary quality standards and specifications for our SpectroCHIP products; and
- our inability to transition to new suppliers for components for our MassARRAY system and/or our ability to maintain such relationships;

We may not be able to generate any revenue from non-invasive prenatal research-use only or diagnostic tests, or any other tests we may develop.

We have committed significant research and development resources to the development of research-use only and diagnostic tests, particularly non-invasive prenatal tests, for use on our MassARRAY system and other platforms. Although our licensed partner launched the first research use only test, a test for Rhesus D using a real-time PCR platform in early 2008, there is no guarantee that our partner or we will successfully generate significant revenues from this or any other tests for any use. We have no experience in licensing, manufacturing, selling, marketing or distributing our SEQureDx technology, or diagnostic or other tests. If we, or our partners, are not able to successfully market or sell non-invasive prenatal research-use only or diagnostic tests or other tests we may develop for any reason, including the failure to obtain any required regulatory approvals, we will not generate any revenue from the sale of such tests. Even if we are able to develop non-invasive prenatal research-use only or diagnostic or other tests for sale in the marketplace, a number of factors could impact our ability to generate any significant revenue from the sale of such tests, including the following:

- reliance on third-party CLIA-certified (Clinical Laboratory Improvement Amendments, 1988) laboratories, which are subject to routine governmental oversight and inspections for continued operation pursuant to CLIA, to process tests that we develop;
- reliance on third parties to manufacture any non-invasive prenatal research-use only or diagnostic or other tests that we may develop;
- the availability of alternative and competing tests or products;
- compliance with federal, state (including New York state) and foreign regulations for the sale and marketing of research-use only or diagnostic or other tests, including non-invasive prenatal tests;
- the accuracy rates of such tests, including rates of false-negatives and/or false-positives;
- concerns regarding the safety or effectiveness of non-invasive prenatal or other tests;
- changes in the regulatory environment affecting health care and health care providers, including changes in laws regulating laboratory testing and/or device manufacturers;
- the extent and success of our sales and marketing efforts;

- pricing pressures and changes in third-party payor reimbursement policies;
- general changes or developments in the market for women's and/or prenatal health diagnostics, or diagnostics in general;
- ethical and legal issues concerning the appropriate use of the information resulting from diagnostic or other tests; and
- the refusal by women to undergo such tests for moral, religious or other reasons, or based on perceptions about the safety or reliability of such tests.

If our customers are unable to adequately prepare samples for our MassARRAY system, the overall market demand for our products may decline.

Before using the MassARRAY system, customers must prepare samples by following several steps that are subject to human error, including DNA isolation and DNA amplification. If DNA samples are not prepared appropriately, or the proposed assays are too complex, the MassARRAY system may not generate a reading or a correct reading. If our customers experience these difficulties, they might achieve lower levels of throughput than specified for the system. If our customers are unable to generate expected levels of throughput, they might not continue to purchase our consumables, they could express their discontent with our products to others, or they could collaborate with others to jointly benefit from the use of our products. Any or all of these actions would reduce the overall market demand for our products. From time to time, we have experienced customer complaints regarding data quality and difficulty in processing more complex assays.

The sales cycles for our products are lengthy, and we may expend substantial funds and management effort with no assurance of successfully selling our products or services.

The sales cycles for our MassARRAY system products are typically lengthy. Our sales and licensing efforts require the effective demonstration of the benefits, value, and differentiation and validation of our products and services, and significant education and training of multiple personnel and departments within a customer organization. We may be required to negotiate agreements containing terms unique to each prospective customer or licensee which would lengthen the sales cycle. We may expend substantial funds and management effort with no assurance that we will sell our products or services. In addition, this lengthy sales cycle makes it more difficult for us to accurately forecast revenue in future periods and may cause revenues and operating results to vary significantly in such periods.

We may not be able to successfully adapt our products for commercial applications.

A number of potential applications of our MassARRAY technology, including research-use-only and diagnostic applications for non-invasive prenatal and other molecular testing, may require significant enhancements in our core technology or the in-licensing of intellectual property rights or technologies. If we are unable to complete the development, introduction, or scale-up of any product, or if any of our products or applications, such as gene expression analysis, epigenetic analysis or iPLEX Gold multiplexing, do not achieve a significant level of market acceptance, our business, financial condition and results of operations could be seriously harmed. Achieving market acceptance will depend on many factors, including demonstrating to customers that our technology is cost competitive or superior to other technologies and products that are available now or that may become available in the future. We believe that our revenue growth and profitability will substantially depend on our ability to overcome significant technological challenges and successfully introduce our newly developed products, applications, and services into the marketplace.

We have limited commercial production capability and experience and may encounter production problems or delays, which could result in lower revenue.

We partially assemble the MassARRAY system and partially manufacture our consumable chips and MassARRAY kits. To date, we have only produced these products in moderate quantities. We may not be able to

maintain acceptable quality standards as we continue or ramp up production. For example, we have experienced crystallized matrix on some of our chips, which has interfered with chip performance. To achieve anticipated customer demand levels, we will need to scale-up our production capability and maintain adequate levels of inventory while manufacturing our products at a reasonable cost. We may not be able to produce sufficient quantities to meet market demand or manufacture our product at a reasonable cost. If we cannot achieve the required level and quality of production, we may need to outsource production or rely on licensing and other arrangements with third parties. This reliance could reduce our gross margins and expose us to the risks inherent in relying on others. We might not be able to successfully outsource our production or enter into licensing or other arrangements with these third parties, which would adversely affect our business.

We depend on third-party products and services and limited sources of supply to develop and manufacture our products.

We rely on outside vendors to supply certain products and the components and materials used in our products. Some of these products, components and materials are obtained from a single supplier or a limited group of suppliers. Our MassARRAY system is comprised of several components, of which the following are currently obtained from a single supplier: Bruker Daltonics, Inc. supplies our mass spectrometers, PSI, Inc. supplies our chips and Majer Precision Engineering, Inc. supplies the pins for the pintools and Paragon Medsystems LLC supplies our nano dispenser liquid handling devices.

Our consumables also include components provided by sole suppliers, New England Biolabs, Epicentre, and USB. In the event of any adverse developments with these vendors, our product supply may be interrupted, which would have an adverse impact on our business. In the past, we have experienced quality problems with and delays in receiving components used to produce our consumable chips, problems with laser reliability in our mass spectrometers supplied by Bruker and lengthy delays in obtaining lasers for replacement, problems with matrix crystallization on our chips, and also had technical difficulties with our pin-tool nanoliter dispenser device. We have also experienced software and operational difficulties with our MassARRAY Compact system. Our reliance on outside vendors generally and a sole or a limited group of suppliers in particular involves several risks, including:

- the inability to obtain an adequate supply of properly functioning, required products, components, and materials due to capacity constraints, product defects, a discontinuance of a product by a supplier, or other supply constraints;
- reduced control over quality and pricing of products, components, and materials; and
- delays and long lead times in receiving products, components, or materials from vendors.

We and our licensees and collaborators may not be successful in developing or commercializing diagnostic products, diagnostic assays including non-invasive prenatal diagnostic products, or other products using our products, services, or discoveries.

Development of diagnostic or other products by us, our licensees, or our collaborators including assays, are subject to risks of failure inherent in the development and commercial viability of any such product, such as demand for such product. These risks further include the possibility that such product would:

- be found to be ineffective, unreliable, or otherwise inadequate or otherwise fail to receive regulatory approval;
- be difficult or impossible to manufacture on a commercial scale;
- be uneconomical to market;
- fail to be successfully commercialized if adequate reimbursement from government health administration authorities, private health insurers, and other organizations for the costs of these products is unavailable;

- be impossible to commercialize because they infringe on the proprietary rights of others or compete with products marketed by others that are superior; or
- fail to be commercialized prior to the successful marketing of similar products by competitors.

If a licensee discovers or develops diagnostic products or we or a collaborator discover or develop diagnostic or other products using our technology, products, services, or discoveries, we may rely on that licensee or collaborator (hereafter referred to as "partner") for product development, regulatory approval, manufacturing, and marketing of those products before we can realize revenue and some or all of the milestone payments, royalties, or other payments we may be entitled to under the terms of the licensing or collaboration agreement. If we are unable to successfully achieve milestones or our partners fail to develop successful products, we will not earn the revenues contemplated and we may also lose exclusive (as in the case of our license agreement with Isis Innovation Ltd, under which we in-license our fundamental non-invasive prenatal diagnostic technology) or non-exclusive license rights to intellectual property that are required to commercialize such products. Our agreements may allow our partners significant discretion in electing whether to pursue any of these activities. We cannot control the amount and timing of resources our partners may devote to our programs or potential products. As a result, we cannot be certain that our partners will choose to develop or commercialize any products or will be successful in doing so. In addition, if a partner is involved in a business combination, such as a merger or acquisition, or changes its business focus, its performance under its agreement with us may suffer and, as a result, we may not generate any revenues or only limited revenues from the royalty, milestone, and similar payment provisions contained in our agreement with that partner.

We may not successfully obtain regulatory approval of any non-invasive prenatal or other diagnostic product or other product which we or our licensing or collaborative partners develop and we may not be able to successfully partner with CLIA licensed laboratories with respect to research-use-only products.

Products that we or our collaborators develop in the molecular medicine, diagnostic, non-invasive prenatal diagnostic, or other markets, depending on their intended use, may be regulated as medical devices by the FDA and comparable agencies of other countries and require either premarket approval (PMA) or 510(k) clearance from the FDA, prior to marketing. The 510(k) clearance process usually takes from three to six months from submission, but can take longer. The premarket approval process is much more costly, lengthy, uncertain, and generally takes from nine months to one year or longer from submission. Also, recent draft guidance from the FDA suggests changes in regulations that would be applicable to CLIA laboratories which, if such regulations become effective, could burden and delay our ability to partner or collaborate with CLIA laboratories with respect to our commercialization plans for diagnostic products. In addition, commercialization of any diagnostic or other product that our licensees or collaborators or we develop would depend upon successful completion of preclinical testing and clinical trials. Preclinical testing and clinical trials are long, expensive, and uncertain processes, and we do not know whether we, our licensees, or any of our collaborators, would be permitted or able to undertake clinical trials of any potential products. It may take us or our licensees or collaborators many years to complete any such testing, and failure could occur at any stage. Preliminary results of trials do not necessarily predict final results, and acceptable results in early trials may not be repeated in later trials. A number of companies in the pharmaceutical industry, including biotechnology companies, have suffered significant setbacks in advanced clinical trials, even after promising results in earlier trials. Delays or rejections of potential products may be encountered based on changes in regulatory policy for product approval during the period of product development and regulatory agency review. If our projects reach clinical trials, we or our licensees or collaborators could decide to discontinue development of any or all of these projects at any time for commercial, scientific, or other reasons.

If the validity of the consents from volunteers were to be challenged, we could be forced to stop using some of our resources, which would hinder our gene discovery outlicensing efforts and our diagnostic product development efforts.

We have attempted to ensure that all clinical data and genetic and other biological samples that we receive from our subsidiaries and our clinical collaborators have been collected from volunteers who have provided our collaborators or us with appropriate consents for the data and samples provided for purposes which extend to include diagnostic product development activities. We have attempted to ensure that data and samples that have been collected by our clinical collaborators are provided to us on an anonymous basis. We have also attempted to ensure that the volunteers from whom our data and samples are collected do not retain or have conferred on them any proprietary or commercial rights to the data or any discoveries derived from them. Our clinical collaborators are based in a number of different countries, and to a large extent we rely upon our clinical collaborators for appropriate compliance with the voluntary consents provided and with local law and regulation. That our data and samples come from and are collected by entities based in different countries results in complex legal questions regarding the adequacy of consents and the status of genetic material under a large number of different legal systems. The consents obtained in any particular country could be challenged in the future, and those consents could prove invalid, unlawful or otherwise inadequate for our purposes. Any findings against us, or our clinical collaborators, could deny us access to or force us to stop using some of our clinical or genetic resources, which would hinder our diagnostic product development efforts. We could become involved in legal challenges, which could consume a substantial proportion of our management and financial resources.

If we cannot obtain licenses to patented SNPs and genes, we could be prevented from obtaining significant revenue or becoming profitable.

The U.S. Patent and Trademark Office has issued and continues to issue patents claiming SNP and gene discoveries and their related associations and functions. If certain SNPs and genes are patented, we will need to obtain rights to those SNPs and genes to develop, use, and sell related assays and other types of products or services utilizing such SNPs and genes. Required licenses may not be available on commercially acceptable terms. If we were to fail to obtain licenses to certain patented SNPs and genes, we might never achieve significant revenue from our diagnostic product development.

If the medical relevance of SNPs is not demonstrated or is not recognized by others, we may have less demand for our products and services and may have less opportunity to enter into diagnostic product development and commercialization collaborations with others.

Some of the products we hope to develop involve new and unproven approaches or involve applications in markets that we are only beginning to explore. They are based on the assumption that information about genes and SNPs may help scientists better understand conditions or complex disease processes. Scientists generally have a limited understanding of the role of genes and SNPs in diseases, and few products based on gene discoveries have been developed. We cannot be certain that genetic information will play a key role in the development of diagnostics or other products in the future, or that any genetic-based findings would be accepted by diagnostic, pharmaceutical, or biotechnology companies or by any other potential market or industry segment. If we or our customers or collaborators are unable to generate valuable information that can be used to develop diagnostics or other products, the demand for our products, applications, and services will be reduced and our business will be harmed.

We may not be able to form and maintain the collaborative relationships or the rights to third-party intellectual property and technologies that our business strategy requires and such relationships may lead to disputes over technology rights or product revenue, royalties, or other payments.

We form research collaborations and licensing arrangements with collaborators to operate our business successfully. To succeed, we will have to maintain our existing relationships and establish additional

collaborations and licensing arrangements. Our current strategy includes pursuing partnering opportunities with larger companies interested in or involved in the development of pharmaceutical and diagnostic products to potentially advance our disease gene discoveries and related targets toward drug or diagnostic development. Our strategy also includes obtaining licenses to third-party intellectual property rights and technologies, such as our exclusive license to non-invasive prenatal analysis rights that we acquired from Isis Innovation Ltd, to potentially expand our product portfolio and generate additional sources of revenue. If we do not achieve certain milestones in a timely manner, we risk losing our exclusive license rights from Isis Innovation Ltd. We cannot be sure that we will be able to establish any additional research collaborations, licensing arrangements, or other partnerships necessary to develop and commercialize products or that we can do so on terms favorable to us. If we are unable to establish these collaborations or licensing arrangements, we may not be able to successfully develop any diagnostic or other products or applications and generate any milestone, royalty, or other revenue from sales of these products or applications. If our collaborations or licensing arrangements are not successful or we are not able to manage multiple collaborations successfully, our programs will suffer and we may never generate any revenue from sales of products based on licensed rights or technologies or under these collaborative or licensing arrangements. If we increase the number of collaborations or licensing agreements, it will become more difficult to manage the various relationships successfully and the potential for conflicts among the collaborators and licensees or licensors will increase. Conflicts with our collaborators, licensees or licensors, or other factors may lead to disputes over technology or intellectual property rights or product revenue, royalties, or other payments, which may adversely effect our business.

In addition, our government grants provide the government certain license rights to inventions resulting from funded work. Our business could be harmed if the government exercises those rights.

Because we exclusively licensed our non-invasive prenatal diagnostic and gender determination testing rights from Isis Innovation Ltd. any dispute with Isis may adversely affect our ability to develop and commercialize diagnostic tests based on these licensed rights.

In October 2005, we entered into an exclusive license to non-invasive prenatal diagnostic rights with Isis Innovation Ltd, which we amended in October 2006 and in November 2007 to also include exclusive rights to intellectual property for non-invasive prenatal gender determination testing for social and lifestyle purposes. We intend to use the rights that we acquired under the license to develop non-invasive prenatal nucleic acid based tests, including gender determination tests. If there is any dispute between us and Isis regarding our rights under the license agreement, or we do not achieve certain commercial launch milestones, in a timely manner, our ability to exclusively commercialize these diagnostic tests may be adversely affected and could delay or completely terminate our product development and commercialization efforts for these diagnostic tests.

If we do not succeed in obtaining development and marketing rights for products developed in collaboration with others, our revenue and profitability prospects could be substantially harmed.

Our business strategy includes, in part, the development of non-invasive prenatal diagnostic and other products in collaboration with others, or utilizing the technology of others, and we intend to obtain commercialization or royalty rights to those products or technologies. If we are unable to obtain such rights, or are unable to do so on favorable financial terms, our revenue and profitability prospects could be substantially harmed. To date, we have initiated limited activities towards commercializing products developed in collaboration with, or utilizing the technology of, others. Even if we obtain commercialization rights, commercialization of products may require resources that we do not currently possess and may not be able to develop or obtain, or commercialization may be financially unattractive based upon the revenue-sharing terms offered by potential licensors or provided for in the relevant agreement.

Ethical, privacy, or other concerns about the use of genetic information could reduce demand for our products and services.

Genetic testing, including gender determination testing, has raised ethical issues regarding privacy and the appropriate uses of the resulting information. For these reasons, governmental authorities may limit or otherwise regulate the use of genetic testing or prohibit testing for genetic predisposition to certain conditions, particularly for those that have no known cure. Such concerns may lead individuals to refuse to use genetics tests even if permitted. Any of these scenarios could reduce the potential markets for our products and services, which would seriously harm our business, financial condition, and results of operations.

If we breach any of the terms of our license or supply agreements, or these agreements are otherwise terminated or modified, the termination or modification of such agreements could result in our loss of access to critical components and could delay or suspend our commercialization efforts.

We have sourced or licensed components of our technology from other parties. For example, Bruker Daltonics supplies our mass spectrometers, PSI, Inc. supplies our chips and Majer Precision Engineering supplies the pins for our present nanodispenser (pintool) product, and New England Biolabs, Epicentre and USB supply us with reagents used with our consumables. Our failure to maintain continued supply of such components, particularly in the case of sole suppliers, or the right to use these components would seriously harm our business, financial condition, and results of operations. We have minimum purchase obligations under our supply agreement with Bruker. As a result, in the event that demand for our products declines or does not meet our forecasts, we could have excess inventory or increased expenses or our margins could decrease which could have an adverse impact on our financial condition and business. In the event of any adverse developments with these vendors, our product supply may be interrupted, which would have an adverse impact on our business. Changes to or termination of our agreements or inability to renew our agreements with these parties or enter into new agreements with other suppliers could result in the loss of access to these aspects of our technology or other intellectual property rights or technologies that we may acquire from time to time and could impair, delay, or suspend our commercialization efforts. While we negotiate for agreement periods or notice of termination periods that provide us reasonable periods of time to secure alternative supplies, and require that such agreements may not be terminated without advance notice arbitrarily or without good reason, such as uncured breach or insolvency, such provisions may not provide us with adequate time to secure alternative supplies, provide us with access to alternative technologies on commercially acceptable terms, or otherwise provide us with adequate protection.

We may not successfully integrate acquired businesses.

We may acquire additional businesses or technologies, or enter into other strategic transactions. Managing acquisitions entails numerous operational and financial risks, including:

- the inability to retain key employees of any acquired businesses or hire enough qualified personnel to staff any new or expanded operations;
- the impairment of relationships with key customers of acquired businesses due to changes in management and ownership of the acquired businesses;
- the inability to sublease on financially acceptable terms excess leased space or terminate lease obligations of acquired businesses that are not necessary or useful for the operation of our business;
- the exposure to federal, state, local and foreign tax liabilities in connection with any acquisition or the integration of any acquired businesses;
- the exposure to unknown liabilities;
- higher than expected acquisition and integration expenses that would cause our quarterly and annual operating results to fluctuate;

- increased amortization expenses if an acquisition results in significant intangible assets;
- combining the operations and personnel of acquired businesses with our own, which would be difficult and costly;
- disputes over rights to acquired technologies or with licensors or licensees of those technologies; and
- integrating or completing the development and application of any acquired technologies, which would disrupt our business and divert management's time and attention.

We may not be able to successfully compete in the biotechnology and diagnostic industries.

The biotechnology and diagnostic industries are highly competitive. We expect to compete with a broad range of companies in the United States and other countries that are engaged in the development and production of products, applications, services, and strategies to analyze genetic information and strategies to develop and commercialize diagnostic, non-invasive prenatal diagnostic, and other products for customers in the clinical research and clinical marker validation and molecular medicine fields as well as diagnostic service laboratories, animal testing & food safety labs, and customers in other markets. They include:

- biotechnology, pharmaceutical, diagnostic, chemical, and other companies;
- academic and scientific institutions;
- governmental agencies; and
- public and private research organizations.

Many of our competitors have much greater financial, technical, research, marketing, sales, distribution, service, and other resources than we do. Our competitors may offer broader product lines and services and have greater name recognition than we do. Several companies are currently making or developing products that compete with our products. Our competitors may develop or market technologies or products that are more effective or commercially attractive than our current or future products, or that may render our technologies or products obsolete.

We may potentially compete with our customers, which may adversely affect our business.

We have sold MassARRAY systems worldwide to pharmaceutical and biotechnology companies, academic research centers, and government laboratories. Some of our customers use our DNA analysis products to perform contract research services, or to perform genetics studies on their own disease populations for potential diagnostic and drug target identification in the same or similar manner as we have done. Although there are many potential contract research services opportunities and disease areas and diagnostic applications, our customers may seek service work or develop diagnostic assays or may target diseases areas that may overlap with those that we have chosen to pursue. In such cases we may potentially compete against our customers. Competition from our customers may adversely affect our services business or our ability to successfully commercialize diagnostic products.

Our ability to compete in the market may decline if we lose some of our intellectual property rights.

Our success will depend on our ability to obtain and protect patents on our technology, to protect our trade secrets, and to maintain our rights to licensed intellectual property or technologies. Our patent applications or those of our licensors may not result in the issue of patents in the United States or other countries. Our patents or those of our licensors may not afford meaningful protection for our technology and products. Others may challenge our patents or those of our licensors, as is the case with the appeal pending before the EPO with respect to the patent rights that we in-licensed from Isis Innovation, Ltd. for prenatal diagnostics, and as a result, our patents or those of our licensors could be narrowed or invalidated or become unenforceable. Competitors may

develop products similar to ours that do not conflict with our patents or patent rights. Others may develop non-invasive prenatal tests or other diagnostic tests or products,technologies or methods in violation of our patents or those of our licensors, or by operating around our patents or license agreements, which could reduce sales of our consumables or reduce or remove our non-invasive prenatal and other diagnostic commercialization opportunities. To protect or enforce our patent rights, we may initiate interference proceedings, oppositions, or litigation against others. However, these activities are expensive, take significant time and divert management's attention from other business concerns. The patent position of biotechnology companies generally is highly uncertain and involves complex legal and factual questions that are often the subject of litigation. No consistent policy has emerged from the U.S. Patent and Trademark Office, the offices of foreign countries or the courts regarding the breadth of claims allowed or the degree of protection afforded under biotechnology patents. There is a substantial backlog of biotechnology patent applications at the U.S. Patent and Trademark Office and of the equivalent offices around the world and the approval or rejection of patent applications may take several years.

Our success will depend partly on our ability to operate without infringing on or misappropriating the proprietary rights of others.

We may be accused of infringing on the patent rights or misappropriating the proprietary rights of others. From time to time, we receive letters from companies regarding their issued patents and patent applications alleging or suggesting possible infringement. Generally these letters are offers to license and fail to provide adequate evidence or state the basis for a reasonable claim that we are engaging in any infringing activity. Intellectual property litigation is costly, and, even if we prevail, the cost of such litigation would adversely affect our business, financial condition, and results of operations. Litigation is also time consuming and would divert management's attention and resources away from our operations and other activities. If we were not to prevail in any litigation, in addition to any damages we would have to pay, we could be required to stop the infringing activity or obtain a license. Any required license might not be available to us on acceptable terms. Some licenses might be non-exclusive, and our competitors could have access to the same technology licensed to us. If we were to fail to obtain a required license or were unable to design around a patent, we would be unable to sell or continue to develop some of our products, which would have a material adverse affect on our business, financial condition, and results of operations.

The rights we rely upon to protect the intellectual property underlying our products may not be adequate, which could enable others to use our technology and reduce our ability to compete with them.

We require our employees, consultants, advisors, and collaborators to execute confidentiality agreements and in certain cases, assignment or license agreements. We cannot guarantee that these agreements will provide us with adequate intellectual property ownership or protection against improper or unauthorized use or disclosure of confidential information or inventions. In some situations, these agreements may conflict with or be subject to the rights of others with whom our employees, consultants, advisors, or collaborators have prior employment or consulting relationships. In some situations, as is the case with our employees in Germany, these types of agreements or relationships are subject to foreign law, which provides us with less favorable rights or treatment than under U.S. law. Others may gain access to our inventions, trade secrets or independently develop substantially equivalent proprietary materials, products, information, and techniques.

If we cannot attract and retain highly-skilled personnel, our growth might not proceed as rapidly as we intend.

The success of our business will depend on our ability to identify, attract, hire, train, retain, maintain, and motivate highly skilled personnel, particularly sales, scientific, medical, and technical personnel, for our future success. Competition for highly skilled personnel is intense, and we might not succeed in attracting and retaining these employees. If we cannot attract and retain the personnel we require, we would not be able to expand our business as rapidly as we intend. In particular, if we lose any key member of our management team, we may not be able to find suitable replacements and our business may be harmed as a result. If our management team is not

able to effectively manage us through these restructuring changes and transitions, our business, financial condition, and results of operations may be adversely affected. We do not carry "key person" insurance covering any of our officers or other employees.

If we do not effectively manage our business as it evolves, it could affect our ability to pursue opportunities and expand our business.

Evolution in our business has placed and may continue to place a significant strain on our personnel, facilities, management systems, and resources. We will need to continue to improve our operational and financial systems and managerial controls and procedures and train and manage our workforce. We will have to maintain close coordination among our various departments. If we fail to effectively manage the evolution of our business and the significant restructuring changes that we have experienced, our ability to pursue business opportunities, expand our business, and sell our products and applications in new markets may be adversely affected.

We are subject to risks associated with our foreign operations.

We expect that a significant portion of our sales will continue to be made outside the United States. Approximately 46% and 44% of our sales were made outside of the United States during the years ended December 31, 2007 and 2006, respectively. A successful international effort will require us to develop relationships with international customers and collaborators, including distributors. We may not be able to identify, attract, retain, or maintain suitable international customers or collaborators. Expansion into international markets will require us to establish and grow foreign operations, hire additional personnel to run these operations, and maintain good relations with our foreign customers and collaborators or distributors. International operations also involve a number of risks not typically present in domestic operations, including:

- currency fluctuation risks;
- changes in regulatory requirements;
- costs and risks of deploying systems in foreign countries;
- licenses, tariffs, and other trade barriers;
- political and economic instability and possible country-based boycotts;
- difficulties in staffing and managing foreign operations;
- potentially adverse tax consequences;
- the burden of complying with a wide variety of complex foreign laws and treaties; and
- different rules, regulations, and policies governing intellectual property protection and enforcement.

Our international operations are also subject to the risks associated with the imposition of legislation and regulations relating to the import or export of high technology products. We cannot predict whether tariffs or restrictions upon the importation or exportation of our products will be implemented by the United States or other countries.

If our production and laboratory facilities are damaged, our business would be seriously harmed.

Our only production facility is located in San Diego, California, where we also have laboratories. Damage to our facilities due to war, fire, natural disaster, power loss, communications failure, terrorism, unauthorized entry, or other events could prevent us from conducting our business for an indefinite period, could result in a loss of important data or cause us to cease development and production of our products. We cannot be certain that our limited insurance to protect against business interruption would be adequate or would continue to be available to us on commercially reasonable terms, or at all.

Responding to claims relating to improper handling, storage or disposal of hazardous chemicals, and radioactive and biological materials which we use could be time consuming and costly.

We use controlled hazardous and radioactive materials in the conduct of our business, as well as biological materials that have the potential to transmit disease. The risk of accidental contamination or injury from these materials cannot be completely eliminated. If an accident with these substances occurs, we could be liable for any damages that result, which could seriously harm our business. Additionally, an accident could damage our research and manufacturing facilities and operations, resulting in delays and increased costs. Such damage and any expense resulting from delays, disruptions, or any claims may not be covered by our insurance policies.

We may not have adequate insurance if we become subject to product liability or other claims.

Our business exposes us to potential product liability and other types of claims and our exposure will increase as we and our partners and collaborators prepare to commercialize research-use-only or other types of non-invasive prenatal tests. We have product and general liability insurance that covers us against specific product liability and other claims up to an annual aggregate limit of $5 million. Any claim in excess of our insurance coverage would have to be paid out of our cash reserves, which would have a detrimental effect on our financial condition. It is difficult to determine whether we have obtained sufficient insurance to cover potential claims. Also, we cannot assure you that we can or will maintain our insurance policies on commercially acceptable terms, or at all.

Negative conditions in the global credit markets may impair the liquidity of a portion of our investment portfolio.

Our investment securities consist of auction rate securities, corporate debt securities and government agency securities. As of December 31, 2007, our short-term investments included $20.9 million of high-grade (AAA/AA rated) auction rate securities (ARS) issued primarily by municipalities and insurance companies, of which $9.4 million have experienced failed auctions due to lack of liquidity at the time their interest rates were to reset. The recent negative conditions in the global credit markets have prevented some investors from liquidating their holdings, including their holdings of auction rate securities. As a result, certain of these types of securities are not fully liquid and we could be required to hold them until they are redeemed by the issuer or to maturity. We may experience a similar situation with our remaining auction rate securities. In the event we need to access the funds that are in an illiquid state, we will not be able to do so without a loss of principal, until a future auction on these investments is successful, the securities are redeemed by the issuer or they mature. As of December 31, 2007, the carrying value of all ARS was reduced by $1.9 million, from $20.9 million to $19.0 million at December 31, 2007, reflecting the change in fair market value. Although the ARS continue to pay interest according to their stated terms, based on valuation models and an analysis of other-than-temporary impairment factors, a realized loss of approximately $1.1 million was recognized in the fourth quarter of 2007, reflecting the portion of ARS holdings that the Company has concluded have an other-than-temporary decline in value. In addition, we recorded an unrealized loss of approximately $0.8 million in accumulated Other Comprehensive Income as a reduction in shareholders' equity. If the credit ratings of the security issuers deteriorate or if uncertainties in these markets continue and any decline in market value is determined to be other-than-temporary, we would be required to adjust the carrying value of the investment through an impairment charge, which could negatively affect the Company's financial condition, cash flow and reported earnings. Subsequent to year end, we have liquidated all but the remaining $9.4 million of auction rate securities discussed above, however, there is no guarantee that we will be able to liquidate our remaining auction rate securities or might have to incur further realized losses. In addition, subsequent to year end, one of our ARS investments was downgraded to a credit rating of Baaa3 and it is possible that our remaining ARS investments may be subject to additional credit rating downgrades, which could affect the value of the securities and any ability we may have to liquidate these securities in the future.

Our stock price has been and may continue to be volatile, and your investment could suffer a decline in value.

The trading price of our common stock has been volatile and could be subject to wide fluctuations in price in response to various factors, many of which are beyond our control, including but not limited to:

- actual or anticipated variations in quarterly and annual operating results;
- announcements of technological innovations by us or our competitors;
- our success in entering into, and the success in performing under, licensing and product development and commercialization agreements with others;
- securities analysts' earnings projections or securities analysts' recommendations;
- general market conditions out of our control.

The stock market in general, and The NASDAQ Global Market and the market for life sciences companies in particular, have experienced extreme price and volume fluctuations that may have been unrelated or disproportionate to the operating performance of the listed companies. There have been dramatic fluctuations in the market prices of securities of biotechnology companies. These price fluctuations may be rapid and severe and may leave investors little time to react. Broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance. Sharp drops in the market price of our common stock expose us to securities class-action litigation. Such litigation could result in substantial expenses and a diversion of management's attention and resources, which would seriously harm our business, financial condition, and results of operations.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 2. PROPERTIES

We are headquartered in San Diego, California, with wholly-owned subsidiaries located in Hamburg, Germany, and Cambridge, England, New Delhi, India, Hong Kong, and Tokyo, Japan. We also have offices in Queensland, Australia, Beijing, China and Newton, Massachusetts. Collectively, we lease approximately 121,000 square feet under leases that expire at various dates through September 2015, each of which contains laboratory, office, manufacturing, or storage facilities.

The San Diego site is our company headquarters and houses our selling, general, and administrative offices, research and development facilities and manufacturing operations. The sites in Hamburg and Newton are used to support sales and distribution in Europe and the United States, respectively. The Newton site was acquired through our merger with Gemini Genomics in 2001 and is partially subleased. The site in Cambridge, England is used for sales and support activities performed in Europe. Our facilities are adequate for our current needs and we have been and continue to explore sublease opportunities for surplus space at our San Diego facility.

Item 3. LEGAL PROCEEDINGS

In November 2001, we and certain of our current or former officers and directors were named as defendants in a class action shareholder complaint filed by Collegeware USA in the U.S. District Court for the Southern District of New York (now captioned In re Sequenom, Inc. IPO Securities Litigation) Case No. 01-CV-10831. Similar complaints were filed in the same District Court against hundreds of other public companies that conducted initial public offerings of their common stock in the late 1990s and 2000. In the complaint, the plaintiffs allege that our underwriters, certain of our officers and directors and we violated the federal securities laws because our registration statement and prospectus contained untrue statements of material fact or omitted

material facts regarding the compensation to be received by and the stock allocation practices of the underwriters. The plaintiffs seek unspecified monetary damages and other relief. In October 2002, our officers and directors were dismissed without prejudice pursuant to a stipulated dismissal and tolling agreement with the plaintiffs. In February 2003, the District Court dismissed the claim against us brought under Section 10(b) of the Securities Exchange Act of 1934, without giving the plaintiffs leave to amend the complaint with respect to that claim. The District Court declined to dismiss the claim against us brought under Section 11 of the Securities Act of 1933.

In September 2003, pursuant to the authorization of a special litigation committee of our board of directors, we approved in principle a settlement offer by the plaintiffs. In September 2004, we entered into a settlement agreement with the plaintiffs. In February 2005, the District Court issued a decision certifying a class action for settlement purposes and granting preliminary approval of the settlement subject to modification of certain bar orders contemplated by the settlement. In August 2005, the District Court reaffirmed class certification and preliminary approval of the modified settlement. In February 2006, the District Court dismissed litigation filed against certain underwriters in connection with the claims to be assigned to the plaintiffs under the settlement. In April 2006, the District Court held a final fairness hearing to determine whether to grant final approval of the settlement. In December 2006, the U.S. Court of Appeals for the Second Circuit vacated the District Court's decision certifying as class actions the six lawsuits designated as "focus cases." Thereafter the District Court ordered a stay of all proceedings in all of the lawsuits pending the outcome of plaintiffs' petition to the Second Circuit for rehearing *en banc*. In April 2007, the Second Circuit denied plaintiffs' rehearing petition, but clarified that the plaintiffs may seek to certify a more limited class in the District Court. Accordingly, the settlement as originally negotiated was terminated pursuant to stipulation and will not receive final approval. Plaintiffs filed amended complaints in the six focus cases in August 2007. Sequenom is not one of the focus case issuers. In September 2007, Sequenom's named officers and directors again extended the tolling agreement with the plaintiffs. Also in September 2007, the plaintiffs moved to certify the classes alleged in the focus cases and to appoint class representatives and class counsel in those cases. The focus case issuers filed motions to dismiss the claims against them in November 2007 and an opposition to plaintiffs' motion for class certification in December 2007. Both motions are pending.

On August 3, 2007, we received a demand letter dated July 31, 2007, demanding on behalf of an alleged stockholder, Vanessa Simmonds, that our board of directors prosecute a claim against our IPO underwriters, in addition to certain unnamed officers, directors and principal stockholders as identified in our IPO prospectus, for violations of sections 16(a) and 16(b) of the Securities Exchange Act of 1934. The demand letter asserts purchases and sales of our common stock within periods of less than six months and failure to report such transactions, and seeks unspecified disgorgement of profits. We requested further information from Ms. Simmonds in order to evaluate the demand and although Ms. Simmonds provided a response, we still do not have adequate information to evaluate the demand and there has been no further correspondence or communication with Ms. Simmonds.

We do not anticipate that the ultimate outcome of either of the events set forth above will have a material adverse impact on our financial position.

In addition, from time to time, we may be involved in litigation relating to claims arising out of our operations in the normal course of business.

Item 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

No matter was submitted to a vote of security holders during the fourth quarter of 2007.

PART II

Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

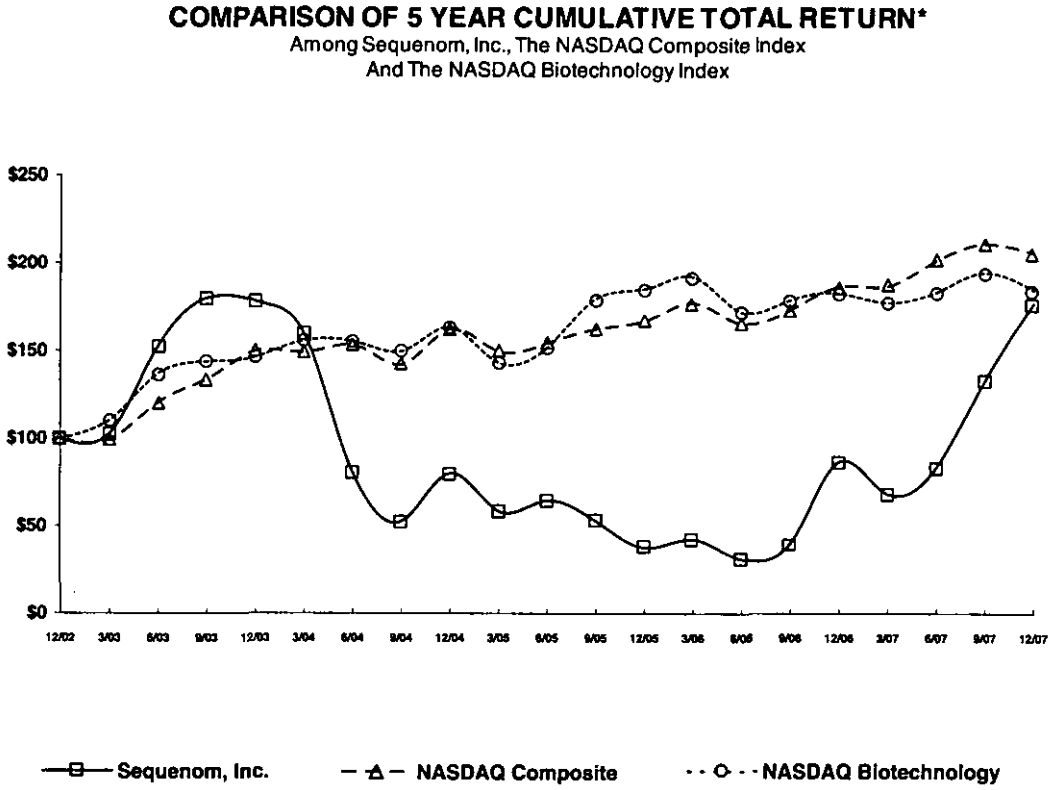
(a) Our common stock is traded on the Nasdaq Global Market under the symbol "SQNM". The following tables set forth the high and low sales prices for the Company's common stock as reported on the Nasdaq Global Market for the periods indicated.

	High	Low
Year Ended December 31, 2007:		
Fourth Quarter	$11.25	$7.80
Third Quarter	7.19	4.33
Second Quarter	4.96	2.99
First Quarter	5.44	3.61
Year Ended December 31, 2006:		
Fourth Quarter	$ 6.24	$2.12
Third Quarter	2.45	1.39
Second Quarter	2.50	1.33
First Quarter	2.64	1.80

There were approximately 142 holders of record of our common stock as of March 3, 2008. We have not paid any cash dividends to date and do not anticipate any being paid in the foreseeable future.

Performance Measurement Comparison*

The following graph compares the cumulative total stockholder return on our common stock between December 31, 2002 and December 31, 2007 with the cumulative total return of (i) the NASDAQ Composite Index ("NASDAQ Index") and (ii) the NASDAQ Biotechnology Index (the "NASDAQ Biotech Index"), over the same period. This graph assumes the investment of $100.00 on December 31, 2002 in common stock, the NASDAQ Index and the NASDAQ Biotech Index, and assumes the reinvestment of any dividends.



* This Section is not "soliciting material" is not deemed "filed" with the SEC and is not to be incorporated by reference in any of our filing under the Securities Act of 1933 or the Securities Exchange Act of 1934 whether made before or after the date hereof without regard to any general incorporation language in any such filing.

Item 6. SELECTED FINANCIAL DATA

The following selected consolidated financial data is derived from our audited consolidated financial statements and should be read in conjunction with the consolidated financial statements and the notes to such statements and "Management's discussion and analysis of financial condition and results of operations" included elsewhere in this report. Historical results are not necessarily indicative of the results to be expected in the future.

	Years ended December 31,				
	2007	2006	2005	2004	2003
	(In thousands, except per share data)				
Consolidated statements of operations data					
Revenues:					
Product	$ 37,365	$ 27,051	$ 19,070	$ 21,026	$ 28,334
Services	3,524	1,023	—	199	1,596
Research and other	113	422	351	1,224	322
Total revenues	41,002	28,496	19,421	22,449	30,252
Costs and expenses:					
Cost of product and service revenue	18,077	11,887	10,370	11,361	17,089
Research and development	14,352	11,939	11,930	18,627	23,254
Selling, general and administrative	31,148	22,425	22,382	23,328	25,483
Restructuring and long-lived asset impairment charge	—	10	593	2,207	—
Amortization of acquired intangibles	—	1,511	2,014	3,075	3,434
Total costs and expenses	63,577	47,772	47,289	58,598	69,260
Loss from operations	(22,575)	(19,276)	(27,868)	(36,149)	(39,008)
Other income (expense):					
Interest income	1,781	906	633	773	1,631
Interest expense	(17)	(20)	(325)	(434)	(680)
Realized loss on marketable securities	(1,071)	—	—	—	—
Other (expense) income , net	(101)	191	94	33	139
Loss before income taxes and cumulative effect of accounting change	(21,983)	(18,199)	(27,466)	(35,777)	(37,918)
Deferred income tax benefit	—	622	929	1,152	1,237
Net loss	$(21,983)	$(17,577)	$(26,537)	$(34,625)	$(36,681)
Net loss per share, basic and diluted	$ (0.57)	$ (0.71)	$ (2.00)	$ (2.62)	$ (2.79)
Shares used in computing net loss per share, basic and diluted	38,865	24,842	13,276	13,219	13,162

	As of December 31,				
	2007	2006	2005	2004	2003
	(In thousands)				
Consolidated balance sheet data					
Cash, cash equivalents, short-term investments and restricted cash	$52,150	$26,330	$ 8,678	$37,944	$ 67,454
Working capital	52,690	23,651	5,403	28,479	56,344
Total assets	76,046	39,881	24,436	58,486	104,936
Total long-term obligations	5,744	3,525	1,363	5,700	6,569
Total stockholders' equity	54,265	25,450	11,743	38,072	72,015

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Overview

We are a genetics and molecular diagnostic company providing genetic analysis products and services and developing diagnostic tests initially targeted at non-invasive prenatal genetic disorders. Our genetic analysis business provides applications that translate genomic science into solutions for biomedical research, agricultural, molecular medicine applications.

Our proprietary MassARRAY system, comprised of hardware, software applications, consumable chips and reagents, is a high performance nucleic acid analysis platform that quantitatively and precisely measures genetic target material and variations. Our genetic services business provides genetic analysis services to customers as a complement and as an alternative to our systems product offerings and acts as a resource for developing and expanding our genetic analysis products. Our research and development efforts are committed to producing new and improved components and applications for our MassARRAY system that will deliver greater system versatility and also reduce the cost per data point generated. .

We are developing various molecular diagnostic tests in prenatal genetic disorders, oncology and infectious diseases. We have in-licensed exclusive rights to use free fetal nucleic acids for diagnostic testing from maternal serum or plasma to ascertain various genetic disorders, including gender determination through agreements with Isis Innovation Limited and the Chinese University of Hong Kong which together provide exclusive license rights covering the general diagnostic use of fetal nucleic acids derived from maternal plasma or serum in countries, including the United States, Canada, and with some limitation in other countries in Europe, Australia, Canada and Japan as well as non-exclusive rights in Hong Kong. Our exclusively licensed patent portfolio now includes the general use, on any technology platform, of fetal nucleic acids derived from maternal plasma, serum and in some cases blood for non-invasive prenatal genetic diagnostic testing, including genetic, expression and epigenetic-based assays and tests. Diagnostic tests based on our foundational intellectual property, which is disease independent, could be developed, provided certain technical challenges are overcome, for cystic fibrosis, Tay Sachs, hemoglobinopathies (sickle cell anemia and the thalassemias), Rhesus D, gender determination for x-linked disorders, and chromosomal aneuploidies (such as Down Syndrome), and others, on any platform including mass spectrometry and real time polymerase chain reaction amplification platforms.

We derive revenue primarily from sales of our MassARRAY hardware, software and consumable products. Our standard MassARRAY system combines the following basic components, which contributes to the high level of performance in terms of speed, accuracy and cost efficiency:

- a mass spectrometer, which uses an established analytical method that we have adapted for DNA analysis;
- proprietary analytical reaction technology and sample preparation and dispensing hardware to prepare DNA for analysis including a coated silicon chip known as the SpectroChip bioarray; and
- bioinformatics software that records, calculates, and reports the data generated by the mass spectrometer.

Our MassARRAY technology is accepted as a leading high-performance DNA analysis system for the fine mapping genotyping market. Our customers include clinical research laboratories, biotechnology companies, academic institutions and government agencies. To maximize market penetration and provide customer support for our expanding user base, we have established direct sales and support personnel serving North America, Europe, India, Japan, and other areas of Asia, in addition to regional distribution partners in France, Israel, South Korea, New Zealand, Singapore, Taiwan, and Turkey.

Genetic analysis is primarily conducted in two key biomedical research market sectors: the research market, where we have many customers, and the clinical analysis market, where we are expanding. The research market

is mainly comprised of academic and government institutions, which make initial genetic discoveries. However, it is the source of discoveries of new genetic content. The clinical analysis market is significantly larger and takes the genetic analysis a step further to establish the use of genes and genetic markers for the potential benefit of the general population. The needs of these markets differ significantly. The academic research market, which requires the highest data density per sample, is more tolerant to inconsistencies in data and error rates, and typically has a shorter window of opportunity. Sample throughput is very high. The academic research market is extremely price competitive. The clinical analysis market is typically interested in a defined number of markers per sample, is not as tolerant to inconsistencies and error rates, typically has a longer development cycle, and is less price competitive. Sample throughput requirements are not nearly as high. Considering the clinical analysis market's requirements and the strengths of the MassARRAY system, including its high sensitivity, specificity, and reproducibility, we believe there is significant opportunity to be more competitive in the clinical analysis market.

We have targeted customers conducting quality genotyping and performing fine mapping studies, candidate gene studies, comparative sequencing, gene expression analysis, and epigenetic analysis in the molecular medicine market. Epigenetic analysis, also known as DNA methylation analysis, is the study of changes in DNA in the form of chromatin modifications and/or changes in the presence or absence of methyl groups in specific areas of the DNA. Epigenetic analysis is an important part of cancer and other research areas.

We are targeting customers across four segments: clinical research and clinical marker validation, the emerging field of molecular medicine, diagnostic service laboratories, and animal testing laboratories. We believe the market and opportunities for growth for fine mapping genotyping are increasing as more researchers are completing their larger genomic studies such as whole genome scans. Epigenetic analysis is a relatively new and emerging market, that, along with gene expression analyses, are increasingly being utilized by researchers in conjunction with genotyping to attempt to fully understand genetic cause and effect.

As of December 31, 2007, our revenues consisted of sales of MassARRAY hardware, software, consumables, maintenance agreements, and from services contracts through our genetic analysis contract research services business. The impact of our product offerings and contract research services business on future revenues, margins, expenses, and cash flows remains uncertain and depends on many factors as described in Item 1A of this report under the caption "Risk Factors".

We expect revenues from molecular diagnostics through out-licensing and commercialization of our non-invasive prenatal diagnostics technology, including technology for Rhesus D incompatibility using a real-time polymerase chain reaction platform, to be minimal for the foreseeable future. To the extent that revenues are realized from our molecular diagnostic tests, including non-invasive prenatal diagnostics technology or from our prior disease gene discoveries, if at all, they may fluctuate significantly as revenues will be based upon the occurrence of certain milestones, our reliance upon and the progress made by our collaborative partners, successful product development and commercialization, and product demand, all of which are uncertain and difficult to predict. As a result, our entitlement to, and the timing and amounts of, any licensing and milestone payments and royalty or revenue sharing payments on future diagnostic or other product sales are uncertain and difficult to predict. To achieve such revenues we will likely be dependent upon the efforts, resources and success of present and future collaborators and licensees who may need to invest significant dollar amounts in research and development efforts, commercialization efforts, clinical trials, and obtaining regulatory approvals over several years. Such revenues, if any, are uncertain and also depend on many factors as described in Item 1A of this report under the caption "Risk Factors."

We have a history of recurring losses from operations and have an accumulated deficit of $482.1 million as of December 31, 2007. Our capital requirements to sustain operations, including research and development projects, have been and will continue to be significant. As of December 31, 2007, we had available cash and short-term investments totaling $50.8 million and working capital of $52.7 million.

In April 2007, we closed a $20.0 million registered direct offering of our common stock to several new and existing investors. Under the terms of the transaction, we issued and sold 6,666,666 shares at $3.00 per share, with aggregate net proceeds of approximately $18.3 million after deducting placement agents' fees and transaction expenses.

In October 2007, we closed a private placement of our common stock for approximately $30.5 million to certain investors. Under the terms of the transaction we issued and sold 3,383,335 shares at $9.00 per share, with aggregate net proceeds of approximately $28.1 million after deducting placement agents' fees and estimated transaction expenses.

Critical Accounting Policies

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions in certain circumstances that affect amounts reported in the accompanying consolidated financial statements and related notes. Certain of these accounting policies that we believe are the most critical to our investors' understanding of our financial results and condition are discussed below. Our significant accounting policies are more fully described in Note 2 to our Consolidated Financial Statements included elsewhere in this report. In preparing these financial statements, management uses its judgment to determine the appropriate assumptions to be used in the determination of certain estimates. The application of these accounting policies involves the exercise of judgment and use of estimates and assumptions as to future uncertainties and, as a result, actual results could differ from these estimates.

Revenue Recognition

We recognize revenue in accordance with current accounting rules, which primarily include the Securities and Exchange Commission's Staff Accounting Bulletin, or SAB, No. 104, "Revenue Recognition." In accordance with SAB No. 104, revenues are recognized when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed and determinable, and collectibility is reasonably assured. We consider EITF 00-21, "Accounting for Revenue Arrangements with Multiple Deliverables", and for MassARRAY system sales, the arrangement consideration is allocated among the separate units of accounting based on their relative fair values. The separate units of accounting are typically the system and software itself and maintenance contracts sold at the time of the system sale. Revenue is deferred for fees received before earned. Revenues from sales of consumables are recognized generally upon shipment and transfer of title to the customer. Revenue from sales of MassARRAY systems with standard payment terms of net 30 days are recognized upon shipment and transfer of title to the customer or when all revenue recognition criteria are met. Our contracts do not contain refund or cancellation clauses. Revenues from the sale or licensing of our proprietary software are recognized upon transfer of title to the customer or the duration of the software license. We recognize revenue on maintenance services for ongoing customer support over the maintenance period. Revenues from genetic services are recognized at the completion of key stages in the performance of the service, which is generally delivery of SNP assay information. Grant revenue is recorded as the research expenses relating to the grants are incurred, provided that the amounts received are not refundable if the research is not successful. Amounts received that are refundable if the research is not successful would be recorded as deferred revenue and recognized as revenue upon the grantor's acceptance of the success of the research results.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Significant estimates are as follows:

- *Accrued acquisition and integration costs.* To the extent that exact amounts were not determinable at the time of acquisition, we estimated amounts for direct costs of the acquisition of Gemini Genomics and Axiom Biotechnologies and the related integration costs in accordance with EITF 95-3, "Recognition of Liabilities in Connection with a Purchase Business Combination" and SFAS No. 141, "Business Combinations". Amounts accrued relating to acquisition and integration costs totaled $27.4 million and as of December 31, 2007 and 2006 approximately $0.7 million and $1.0 million remained accrued, respectively. The amount accrued at December 31, 2007 represents our remaining lease payments, net of estimated sublease income of $1.0 million from existing subleased space. If we do not receive all the amounts due to us under non-cancelable subleases, we will incur additional expense.
- *Impairment of long-lived assets.* We periodically re-evaluate the original assumptions and rationale utilized in the establishment of the carrying value and estimated lives of our long-lived assets. The criteria used for these evaluations include management's estimate of the asset's continuing ability to generate income from operations and positive cash flows in future periods as well as the strategic significance of any intangible assets in our business objectives. If assets are considered to be impaired, the impairment recognized is the amount by which the carrying value of the assets exceeds the fair value of the assets. No impairment of long-lived assets was recorded in 2007, 2006 or 2005. Intangible assets totaled $0.1 million, net of accumulated amortization, at December 31, 2007.
- *Allowance for Doubtful Accounts.* We maintain an allowance for doubtful accounts for estimated losses resulting from the inability of our customers to make required payments. We evaluate the collectability of our accounts receivable balance based on a combination of factors. We regularly analyze customer accounts, review the length of time receivables are outstanding and review the historical loss rates if the financial condition of our customers were to deteriorate additional allowances could be required.
- *Reserves for obsolete and slow-moving inventory.* We operate in an industry characterized by rapid improvements and changes to technology and products. The introduction of new products by us or our competitors can result in our inventory being rendered obsolete or requiring us to sell items at a discount to cost. We estimate the recoverability of our inventory by reference to our internal estimates of future demands and product life cycles. If we incorrectly forecast demand for our products or inadequately manage the introduction of new product lines, we could materially impact our financial statements by having excess inventory on hand. Our future estimates are subjective and could be incorrect. During 2007, slow-moving inventory reserves of $0.2 million were charged against cost of goods sold and the total reserve was $1.1 million at December 31, 2007.
- *Income taxes.* In accordance with SFAS No. 109, "Accounting for Income Taxes" (SFAS No. 109), the provision for income taxes is computed using the asset and liability method, under which deferred tax assets and liabilities are recognized for the expected future tax consequences of temporary differences between the financial reporting and tax bases of assets and liabilities, and for the expected future tax benefit to be derived from tax loss and credit carryforwards. Deferred tax assets and liabilities are determined using the enacted tax rates in effect for the years in which those tax assets are expected to be realized. A valuation allowance is established when it is more likely than not the future realization of all or some of the deferred tax assets will not be achieved. The evaluation of the need for a valuation allowance is performed on a jurisdiction by jurisdiction basis, and includes a review of all available positive and negative evidence. As of December 31, 2007, we have maintained a valuation allowance against U.S. and foreign deferred tax assets that we concluded have not met the "more likely than not" threshold required under SFAS No. 109.

  Due to the adoption of SFAS No. 123(R), we recognize excess tax benefits associated with share-based compensation to stockholders' equity only when realized. When assessing whether excess tax benefits relating to share-based compensation have been realized, we follow the with-and-without approach, excluding any indirect effects of the excess tax deductions. Under this approach, excess tax benefits related to share-based compensation are not deemed to be realized until after the utilization of all other tax benefits available to us.

Effective January 1, 2007, we adopted FASB Interpretation (FIN) No. 48, *Accounting for Uncertainty in Income Taxes—an interpretation of FASB Statement No. 109*, which clarifies the accounting for uncertainty in tax positions. FIN No. 48 requires that we recognize the impact of a tax position in our financial statements only if that position is more likely than not of being sustained upon examination by taxing authorities, based on the technical merits of the position. Any interest and penalties related to uncertain tax positions will be reflected in income tax expense.

- *Stock-based compensation.* We account for stock-based compensation in accordance with SFAS No. 123(R), *Share-Based Payment.* Under the provisions of SFAS No. 123(R), stock-based compensation cost is estimated at the grant date based on the award's fair-value as calculated by the Black-Scholes-Merton (BSM) option-pricing model and is recognized as expense over the requisite service period. The BSM model requires various highly judgmental assumptions including volatility, forfeiture rates, and expected option life. If any of these assumptions used in the BSM model change significantly, stock-based compensation expense may differ materially in the future from that recorded in the current period.

New Accounting Pronouncements

In February 2007, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities—Including an Amendment of FASB Statement No. 115" (SFAS No. 159), which provides companies with an option to report selected financial assets and liabilities at fair value. The objective of SFAS No. 159 is to reduce both the complexity in accounting for financial instruments and the volatility in earnings caused by measuring related assets and liabilities differently. SFAS No. 159 also establishes presentation and disclosure requirements designed to facilitate comparisons between companies that choose different measurement attributes for similar types of assets and liabilities. SFAS No. 159 is effective for fiscal years beginning after November 15, 2007, with earlier adoption permitted. We are currently in the process of determining the impact of the provisions of SFAS No. 159 on our results of operations.

In June 2007, the FASB ratified Emerging Issues Task Force Issue ("EITF") No. 07-3, "Accounting for Nonrefundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities" (EITF No. 07-3). EITF No. 07-3 requires that nonrefundable advance payments for goods and services that will be used or rendered in future research and development activities pursuant to executory contractual arrangements be deferred and recognized as an expense in the period that the related goods are delivered or services are performed. We will adopt EITF No. 07-3 as of January 1, 2008, and it is not expected to have a material impact on our results of operations or financial position.

SFAS No. 141(R), Business Combinations, was issued in December of 2007. SFAS No. 141(R) established principles and requirements for how the acquirer of a business recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed, and any non-controlling interest in the acquiree. SFAS No. 141(R) also provides guidance for recognizing and measuring the goodwill acquired in the business combination and determines what information to disclose to enable users of the financial statements to evaluate the nature and financial effects of the business combination. The guidance will become effective for fiscal years beginning after December 15, 2008. The Company does not expect the adoption of this pronouncement to have a material impact on the Company's consolidated financial statements.

Results of Operations
Years ended December 31, 2007 and 2006

Revenues

Total revenues were $41.0 million and $28.5 million for the years ended December 31, 2007 and 2006, respectively. MassARRAY and other product related revenues are derived from the sale of MassARRAY systems, consumables, sales and licensing of our proprietary software, maintenance contracts, and license fees from end-users.

Consumable sales increased to $16.5 million in 2007 from $12.9 million in 2006. The increase in 2007 compared to 2006 was a result of an increase in our installed base of MassARRAY Compact systems as well as demand for our iPLEX genotyping assay.

MassARRAY and other product related revenue increased to $20.8 million in 2007 from $14.1 million in 2006. The increase of $6.7 million was primarily due to an increase in MassARRAY system hardware and software sales to $18.4 million in 2007 from $11.9 million in 2006. Revenue from other product sales, including MassARRAY system maintenance contracts, license fees and royalties, for the years ended December 31, 2007 and 2006 was $2.5 million and $2.2 million, respectively.

We recorded genetic analysis service revenues of $3.5 million for the year ended December 31, 2007, compared to $1.0 million in service revenues for the year ended December 31, 2006. The increase from 2006 is attributable to growth in our contract research service business primarily in the clinical analysis and academic research markets.

Research and other revenue was $0.1 million in 2007 and $0.4 million 2006. During the year ended December 31, 2006, we recognized $0.3 million of revenue related to the license of certain proprietary genetic content to a third party. The timing of research revenues depends upon our expenditures on grant research and the receipt of the grant funding from the sponsoring agencies. We expect grant revenue to be minimal going forward.

Domestic and non-U.S. revenues were $22.2 million and $18.8 million, respectively, for the year ended December 31, 2007, and $16.0 million and $12.5 million, respectively, for the year ended December 31, 2006.

Our revenues have historically fluctuated from period to period and likely will continue to fluctuate substantially in the future based upon the unpredictable sales cycle for the MassARRAY system, revenue recognition criteria, and the overall acceptance and demand for our new and existing commercial products and services.

Cost of Product and Service Revenues and Gross Margins

Cost of product revenues was $14.6 million and $11.4 million and gross margins were 61% and 58% for the years ended December 31, 2007 and 2006, respectively. The increase in gross margin for product revenues in 2007 compared to 2006 is attributable to higher systems sales with a favorable mix of new systems at higher margins versus trade-ins and strategic system placements at lower margins, as well as increased consumable sales that generally have higher average gross margins compared to systems sales.

Cost of service revenues was $3.5 million and $0.5 million and gross margins were 1.2% and 49%, respectively, for the years ended December 31, 2007 and 2006. Our genetic analysis contract research service business incurred higher expenses, primarily in salaries and related personnel expenses, as operations continue to become fully functional in anticipation of service contract requirements. Gross margins on contract research service revenues are dependent on the particular contract terms of the work undertaken.

The Company's overall gross margin was 56% and 58% for the years ended December 31, 2007 and 2006, respectively. The decrease in overall gross margin in 2007 is attributable to lower margins within contract

research services as we increase operations to become fully functional, offset by an overall increase in consumables sales that sell at higher average gross margins.

We believe that gross margin in future periods will be affected by, among other things, the selling price for systems and consumables, consumable sales per MassARRAY system sold, the mix of products and contract research services sold, the mix of systems and consumables sold, competitive conditions, costs of goods, sales volumes, discounts offered, sales through distributors, inventory reserves and obsolescence charges required and royalty payment obligations on in-licensed technologies.

Research and Development Expenses

Research and development costs were $14.4 million and $11.9 million for the years ended December 31, 2007 and 2006, respectively. These expenses consist primarily of salaries and related personnel expenses, improvements to our existing products, validation of products under development, and expenses relating to work performed under research contracts.

The increase in research and development expenses of $2.5 million for 2007 compared to 2006 primarily resulted from increased headcount and travel costs of $2.2 million, consultant and collaboration costs of $1.8 million related to our non-invasive prenatal technology development and MassARRAY product development, operating supplies of $0.9 million, share-based compensation costs of $0.3 million, headcount-based overhead allocation expense of $0.2 million and office expenses of $0.1 million. These increases were offset by $3.0 million in the absorption of cost of service revenue as our contract research service operations became fully functional during 2007.

We expect our research and development expenses to increase in 2008 compared to 2007, as we increase our investment in the development of non-invasive prenatal nucleic acid based tests and as we continue to invest in new products and applications for our MassARRAY platform.

Sales and Marketing Expenses

Sales and marketing costs were $17.0 million and $11.0 million for the years ended December 31, 2007 and 2006, respectively. These expenses consist primarily of salaries and related expenses for sales and marketing, customer support, and business development personnel and their related department expenses.

The increase in selling and marketing expenses of $6.0 million for 2007 compared to 2006 primarily resulted from increased headcount and travel of $4.0 million, $0.6 million of consultant expenses for sales and marketing projects associated with our non-invasive prenatal diagnostics technology, $0.5 million for advertising and public relations expenses, $0.4 million for higher share-based compensation expense, $0.4 million for higher headcount-based overhead allocation charges and $0.4 million for higher office and operating expenses. These increases were offset by a reduction in start-up costs in 2007 compared to 2006 of $0.3 million related to our China office.

We expect our sales and marketing headcount and associated expenses to increase in 2008 compared to 2007, as we strengthen our sales force and continue building our commercial development team for our non-invasive prenatal diagnostic technology.

General and Administrative Expenses

General and administrative costs were $14.1 million and $11.4 million for the years ended December 31, 2007 and 2006, respectively. These expenses consist primarily of salaries and related expenses for legal, finance, and human resource personnel, and their related department expenses.

The increase in general and administrative expenses of $2.7 million for 2007 compared to 2006 primarily resulted from increased headcount and travel expense of $1.0 million, share-based compensation of $1.2 million, legal expense of $0.5 million related to our patent portfolio, consultant expenses of $0.4 million, insurance costs and other office expenses of $0.2 million. These increases were partially offset by reduced headcount-based overhead allocation of $0.2 million, lower administrative expenses of $0.1 million and higher absorption of overhead costs of $0.5 million.

We expect general and administrative costs to increase in 2008 compared to 2007, as we build our infrastructure in order to support our anticipated growth.

Asset Impairment and Restructuring Charges

During 2005, we introduced a cost reduction plan that included a reduction of existing headcount by approximately 30 across all departments by the end of 2005. We incurred a charge of $0.8 million in 2005 relating to severance and related expenses in connection with this headcount reduction. At December 31, 2005, we had an accrued balance of $0.3 million in respect of the restructuring charges representing the remaining payout of severance costs with the remaining charges incurred during 2006. During 2007, the Company incurred no charges related to this restructuring and does not anticipate to incur any further expenses related to this cost reduction plan.

Amortization of Acquired Intangibles

In connection with the acquisition of Gemini Genomics, plc in 2001, we acquired approximately $18.7 million of intangible assets, including clinical data collections and patent rights that were being amortized over three to five years. No amortization was recorded in 2007 and $1.5 million was recorded as amortization in 2006. As of December 31, 2006, these intangible assets were fully amortized.

Interest Income

Interest income was $1.8 million in 2007 compared to $0.9 million in 2006. The increase in 2007 compared to 2006 was due to higher cash, cash equivalents and short-term investment balances as a result of our registered direct offering of our common stock with net aggregate proceeds of approximately $18.3 million after deducting placement agents' fees and transaction expenses in April 2007 and the private placement of our common stock with net aggregate proceeds of approximately $28.1 million after deducting placement agents' fees and transaction expenses in October 2007.

Realized Loss on Marketable Securities

Realized loss on marketable securities was $1.1 million compared to no realized loss in 2006. The realized loss was due to an other-than-temporary impairment on one of our investments in auction rate securities. If the credit ratings of the security issuers deteriorate or if uncertainties in these markets continue and any decline in market value is determined to be other-than-temporary in our remaining auction rate security investments, we would be required to adjust the carrying value of the investment through additional impairment charges.

Interest Expense

Interest expense was $17,000 and $20,000 for 2007 and 2006, respectively. Our interest expense balance remains lower due to the payoff of credit facilities and capital leases after our private placement funding in June 2006, offset by the utilization of our asset-backed loan commencing in September 2007.

Deferred Income Tax Benefit

The deferred tax benefit of $0.6 million for the year ended December 31, 2006 was primarily due to the amortization on the intangible assets, including clinical data collections and patent rights, acquired from Gemini Genomics. There was no comparable benefit for the year ended December 31, 2007.

Results of Operations
Years ended December 31, 2006 and 2005

Revenues

Total revenues were $28.5 million and $19.4 million for the years ended December 31, 2006 and 2005, respectively. MassARRAY and other product related revenues are derived from the sale of MassARRAY systems, consumables, sales and licensing of our proprietary software, maintenance contracts, and license fees from end-users.

Consumable sales increased to $12.9 million in 2006 from $11.0 million in 2005. The increase in 2006 compared to 2005 was a result of an increase in our installed base of MassARRAY Compact systems as well as demand for our iPLEX genotyping assay.

MassARRAY and other product related revenue increased to $14.1 million in 2006 from $8.1 million in 2005. The increase of $6.0 million was primarily due to an increase in MassARRAY system hardware and software sales to $11.9 million in 2006 from $5.6 million in 2005. Revenue from other product sales, including MassARRAY system maintenance contracts, license fees and royalties, for the years ended December 31, 2006 and 2005 was $2.2 million and $2.5 million, respectively.

As of December 31, 2005, we had shipped inventory, consisting primarily of hardware, with a cost of $1.3 million to certain customers in respect of purchase orders or contracts received which did not meet our criteria for revenue recognition. We recognized $2.4 million of revenue in respect of these shipments upon receipt of payment from or delivery of software products to these customers during the year ended December 31, 2006.

We recorded genetic analysis service revenues of $1.0 million for the year ended December 31, 2006. We recorded no service revenues for the year ended December 31, 2005.

Research and other revenue was $0.4 million in 2006 and 2005. During the year ended December 31, 2006, we recognized $0.3 million of revenue related to the license of certain proprietary genetic content to a third party. The timing of research revenues depends upon our expenditures on grant research and the receipt of the grant funding from the sponsoring agencies.

Domestic and non-U.S. revenues were $16.0 million and $12.5 million, respectively, for the year ended December 31 2006 and $10.2 million and $9.2 million, respectively, for the year ended December 31, 2005.

Cost of Product and Service Revenues and Gross Margins

Cost of product revenues were $11.4 million and $10.4 million and gross margins were 58% and 46% for the years ended December 31, 2006 and 2005, respectively. Gross margins primarily increased due to lower charges to obsolescence reserves resulting from improvement in inventory management.

Cost of service revenues were $0.5 million and gross margins were 49%, respectively, for the year ended December 31, 2006. There were no service revenues or cost of service revenues for the year ended December 31, 2005. Gross margins are dependent on the particular service contract terms of the work undertaken in each year.

Research and Development Expenses

Research and development expenses were $11.9 million for both years ended December 31, 2006 and 2005. These expenses consist primarily of salaries and related personnel expenses, improvements to our existing products, validation of products under development, and expenses relating to work performed under research contracts.

Research and development expenses in 2006 compared to 2005 were primarily affected by increased operating supplies of $0.4 million and consultant and collaboration costs of $0.7 million related to our non-invasive prenatal technology development and MassARRAY product development. These increases were offset by reductions in headcount costs of $0.4 million and allocated overhead costs of $0.7 million.

Sales and Marketing Expenses

Sales and marketing expenses were $11.0 million for both years ended December 31, 2006 and 2005. These expenses consist primarily of salaries and related expenses for sales and marketing, customer support, and business development personnel and their related department expenses.

Sales and marketing expenses in 2006 compared to 2005 were primarily affected by increased costs of $0.3 million related to the establishment of a representative office in China, legal costs of $0.1 million and share-based payments and other costs of $0.3 million. These increases were offset by reductions in headcount costs of $0.2 million, allocated expenses of $0.2 million and public relations expenses of $0.3 million.

General and Administrative Expenses

General and administrative expenses were $11.4 million for both of the years ended December 31, 2006 and 2005. These expenses consist primarily of salaries and related expenses for legal, finance, and human resource personnel, and their related department expenses.

General and administrative expenses in 2006 compared to 2005 were primarily affected by increased share-based payments of $0.6 million, bad debt expense of $0.2 million and allocated costs of $0.2 million. These increases were partially offset by reduced headcount costs of $0.8 million and lower insurance costs due to reduced premiums of $0.2 million.

Asset Impairment and Restructuring Charges

During the third quarter of 2005, we introduced a cost reduction plan, which included a reduction of existing headcount by approximately 30 across all departments by the end of 2005. We incurred a charge of $0.8 million in 2005 relating to severance and related expenses in connection with this headcount reduction. At December 31, 2005, we had an accrued balance of $0.3 million in respect of the restructuring charges representing the remaining payout of severance costs. We paid the remaining amounts due during 2006.

During the third quarter of 2004, we closed our Sequenom Pharmaceuticals business segment. During the first quarter of 2005, we sold certain tangible assets and recovered $0.2 million in excess of the carrying value, which we had previously fully provided for as part of the restructuring charge.

Amortization of Acquired Intangibles

In connection with the acquisition of Gemini Genomics, plc in 2001, we acquired approximately $18.7 million of intangible assets, including clinical data collections and patent rights. Our intangible assets are being amortized over three to five years. The 2006 and 2005 amortization charges of $1.5 million and $2.0 million, respectively, represents the amortization of all these assets held throughout the respective year.

Interest Income

Interest income was $0.9 million in 2006 compared to $0.6 million in 2005. The increase was primarily due to the increased cash balance as a result of our private placement of common stock and warrants in June 2006.

Interest Expense

Interest expense was $20,000 in 2006 compared to $0.3 million in 2005. The decreases resulted from our lower level of borrowings as we paid off our capital leases. In December 2005, we paid the remaining balance of $4.3 million under our credit facility with a financial institution. As a result, our interest expense declined in 2006.

Deferred Income Tax Benefit

The deferred tax benefit of $0.6 million and $0.9 million for the years ended December 31, 2006 and 2005, respectively, were primarily due to the amortization on the intangible assets, including clinical data collections and patent rights, acquired from Gemini Genomics.

Liquidity and Capital Resources

As of December 31, 2007, cash, cash equivalents, short-term investments and restricted cash totaled $52.1 million, compared to $26.3 million at December 31, 2006. Our cash reserves are held in a variety of interest-bearing instruments, including auction rate securities, commercial paper of prime quality, certificates of deposit, guaranteed bankers acceptance and U.S. Government instruments.

Additional discussion with respect to the risks and uncertainties associated with our auction rate securities is included in the "Risk Factors" in Item 1A of this report, in "Quantitative and Qualitative Disclosures about Market Risk" in Item 7A of this report and in notes to the consolidated financial statements included elsewhere in this report.

We have a history of recurring losses from operations and have an accumulated deficit of $482.1 million as of December 31, 2007. Our capital requirements to sustain operations, including research and development projects, have been and will continue to be significant. As of December 31, 2007, we had available cash and short-term investments totaling $50.8 million and working capital of $52.7 million. As of December 31, 2006, we had available cash and short-term investments of $24.9 million and working capital of $23.7 million.

In June 2006, we closed a private placement financing that provided us with approximately $30 million of net proceeds from the sale of common stock and warrants to purchase shares of common stock.

On April 30, 2007, we closed a $20.0 million registered direct offering of our common stock to several new and existing investors. Under the terms of the transaction, we issued and sold 6,666,666 shares at $3.00 per share, with net aggregate proceeds of approximately $18.3 million, after deducting placement agents' fees and estimated expenses.

In October 2007, we closed a private placement of our common stock for approximately $30.5 million to certain investors. Under the terms of the transaction we issued and sold 3,383,335 shares at $9.00 per share, with net aggregate proceeds of approximately $28.1 million after deducting placement agents' fees and estimated transaction expenses.

We consider the material drivers of our cash flow to be sales volumes, inventory management and operating expenses. Our principal sources of liquidity are our cash, cash equivalents and short-term investments. Cash used in operations for year ended December 31, 2007 was $17.4 million compared to $10.7 million for 2006. The use of cash was primarily a result of the net loss of $22.0 million for year ended December 31, 2007, increased by

accounts receivable balances of $6.0 million due to increased revenue and the timing of underlying sales activity, $1.6 million from inventory balances due to greater on-hand systems for anticipated 2008 systems sales, $0.5 million from other current assets, prepaid expenses and other assets, as well as $0.6 million from lower deferred revenue balances and other liabilities of $0.1 million. Cash usages were partially offset by stock-based compensation of $3.1 million, non-cash depreciation and amortization of $1.9 million, deferred rent of $1.6 million, a realized loss on one of our auction rate securities of $1.1 million, $5.0 million from increase accounts payable and accrued expense balances due to increased operations during 2007 and other non-cash items of $0.7 million. At our current and anticipated level of operating loss, we expect to continue to incur an operating cash outflow for the foreseeable future.

Investing activities, other than the changes in our short-term investments and restricted cash that utilized $17.4 million, consists of purchases for capital equipment that used $3.5 million in cash during the year ended December 31, 2007, compared to $1.2 million for the same period of 2006.

Net cash provided by financing activities was $49.3 million during the year ended December 31, 2007 compared to $29.5 million provided by financing activities for the same period in 2006. Financing activities during the year ended December 31, 2007, included net receipts of $46.3 million from the issuance of common stock from our April 2007 registered direct offering and October 2007 private placement. Additionally, $1.3 million was received on fundings from our asset-backed loan and $1.8 million from the exercise of warrants, stock options and our employee stock purchase plan, offset by approximately $0.1 million in payments on our asset-backed loan.

The following table summarized our contractual obligations as of December 31, 2007 ($ in thousands):

Contractual obligations	Total	Less Than 1 Year	1-3 Years	After 3 Years
Open purchase orders	$ 6,939	$ 6,939	$ —	$ —
Long-term debt obligation	1,247	424	823	—
Collaborations	10,629	854	850	8,925
Operating leases	41,338	6,392	12,243	22,703
Total contractual obligations	$60,153	$14,609	$13,916	$31,628

Future operating lease commitments for leases have not been reduced by future minimum sublease rentals to be received through December 2010 aggregating $1.0 million. Open purchase orders are primarily for inventory items and research and development supplies.

In September 2005, we entered into an amendment to our lease for our corporate headquarters in San Diego. The lease amendment provides for the deferral of approximately $3.2 million of the monthly rent payments by reducing the monthly payments through September 30, 2007 and increasing the aggregate monthly payments by the deferred amount for the remaining term of the lease, from October 1, 2007 to September 30, 2012. The total obligation under the lease remains unchanged. The contractual obligation table above reflects the deferral of these rent payments.

Long-term debt obligations includes the associated interest payable on this borrowing.

Other commitments and contingencies that may result in contractual obligations to pay are described in the notes to our consolidated financial statements included elsewhere in this report.

Based on our current plans, we believe our cash, cash equivalents and short-term investments, including the net proceeds from our 2007 registered direct offering and private placement will be sufficient to fund our operating expenses and capital requirements through 2009. However, the actual amount of funds that we will

need will be determined by many factors, some of which are beyond our control, and we may need funds sooner than currently anticipated. These factors include but are not limited to:

- the size of our future operating losses;
- the level of our success in selling our MassARRAY products and services;
- our ability to introduce and sell new products and services, and successfully reduce inventory levels of earlier products;
- the level of our selling, general and administrative expenses;
- our success in and the expenses associated with researching, developing and commercializing diagnostic products, alone or in collaboration with our partners, and obtaining any required regulatory approval for those products;
- the extent of our research and development pursuits, including our level of investment in MassARRAY product research and development, and diagnostic research and development, particularly for non-invasive prenatal diagnostics;
- the extent to which we enter into, maintain, and derive revenues from licensing agreements, including agreements to out-license our non-invasive prenatal diagnostic technology, research and other collaborations, joint ventures and other business arrangements;
- the extent to which we acquire, and our success in integrating, technologies or companies;
- the level of our legal expenses including those expenses associated with litigation and with intellectual property protection; and
- regulatory changes and technological developments in our markets.

At December 31, 2007, we had outstanding stand-by letters of credit with financial institutions totaling $1.1 million related to our building and operating leases, which will remain in place until the expiration of our Newton, Massachusetts building lease agreement in December 2010.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Marketable Securities

The primary objective of our investment activities is to preserve principal while at the same time maximizing the income we receive from our investments without significantly increasing risk. Some of the securities that we invest in may have market risk. This means that a change in prevailing interest rates may cause the fair value of the principal amount of the investment to fluctuate. For example, if we hold a security that was issued with a fixed interest rate at the then-prevailing rate and interest rates later rise, the fair value of the principal amount of our investment will probably decline. To minimize this risk in the future, we intend to maintain our portfolio of cash equivalents and short-term investments in a variety of securities, including commercial paper, money market funds, government and non-government debt securities rated BBB or above by Standard & Poors. Our investment policy includes a minimum quality rating for all new investments. If an investment we hold falls below this level, we research the reasons for the fall and determine if we should continue to hold the investment in order to minimize our exposure to market risk of the investment.

We invest primarily in auction rate securities, commercial paper of prime quality, certificates of deposit, guaranteed bankers acceptance and U.S. Government instruments, and by policy, limit the amount of credit exposure to any one issuer. At December 31, 2007, approximately $20.9 million of principal was invested in auction rate securities (ARS). The ARS held are private placement securities with various long-term nominal maturities with interest rates reset through a dutch auction each month, except for one ARS that resets every 92 days. The monthly auctions historically have provided a liquid market for these securities. The investments in ARS represent interests in collateralized debt obligations supported by insurance securitizations and other structured credits, including corporate bonds and to a lesser degree, pools of residential and commercial mortgages.

Consistent with our investment policy guidelines, all ARS investments purchased by us had AAA/AA credit ratings at the time of purchase. With the liquidity issues experienced in global credit and capital markets, the ARS held at December 31, 2007 have experienced multiple failed auctions as the amount of securities submitted for sale has exceeded the amount of purchase orders. All of these securities retained at least a rating of AAA/AA as of December 31, 2007.

We account for our marketable securities in accordance with SFAS No. 115, *Accounting for Certain Investments in Debt and Equity Securities*, and classified them as "available-for-sale." The carrying value of all ARS was reduced by $1.9 million, from $20.9 million to $19.0 million at December 31, 2007, reflecting the change in fair market value. Although the ARS continue to pay interest according to their stated terms, based on valuation models and an analysis of other-than-temporary impairment factors, a realized loss of approximately $1.1 million was recognized in the fourth quarter of 2007, reflecting the portion of ARS holdings that the Company has concluded have an other-than-temporary decline in value. In addition, we recorded an unrealized loss of approximately $0.8 million in accumulated Other Comprehensive Income as a reduction in shareholders' equity, reflecting adjustments to ARS holdings that we assessed have a temporary decline in value. The $1.1 million impairment charge does not have a material impact on our liquidity or financial flexibility.

Due to the lack of availability of observable market quotes on our investment portfolio of marketable securities and ARS, we utilize valuation models including those that are based on expected cash flow streams and collateral values, including assessments of counterparty credit quality, default risk underlying the security, discount rates and overall capital market liquidity. The valuation of our investment portfolio is subject to uncertainties that are difficult to predict. Factors that may impact our valuation include changes to credit ratings of the securities as well as to the underlying assets supporting those securities, rates of default of the underlying assets, underlying collateral value, discount rates, counterparty risk and ongoing strength and quality of market credit and liquidity. In the event we need to access the ARS investments that are in an illiquid state, we will not be able to do so without the possible loss of principal, until a future auction for these investments is successful or they are redeemed by the issuer or they mature. The market value of these securities may decline.

We will continue to monitor and evaluate these investments on an ongoing basis for impairment or for the need to reclassify the remaining ARS investments to long-term.

Foreign currency rate fluctuations

We have foreign subsidiaries whose functional currencies are the Great British Pound, or GBP, and the Euro, or EUR. The subsidiaries' accounts are translated from the relevant functional currency to the U.S. dollar using the current exchange rate in effect at the balance sheet date, for balance sheet accounts, and using the average exchange rate during the period for revenues and expense accounts. The effects of translation are recorded as a separate component of stockholders' equity. Our subsidiaries conduct their business with customers in local currencies. Additionally, we occasionally invoice Australian customers in their local currency. Exchange gains and losses arising from these transactions are recorded using the actual exchange differences on the date of the transaction. We have not taken any action to reduce our exposure to changes in foreign currency exchange rates, such as options or futures contracts, with respect to transactions with our subsidiaries or transactions with our customers where the invoicing currency is not the U.S. dollar.

The table below sets forth our currency exposure (i.e., those transactional exposures that give rise to the net currency gains and losses recognized in the income and expenditure account) on our net monetary assets and liabilities. These exposures consist of our monetary assets and liabilities that are not denominated in the functional currency used by us or our subsidiary having the asset or liability.

	As of December 31, 2007 Net foreign monetary assets/(liabilities)	
Functional currency of operations	U.S. dollars	GBP
	($ in millions)	
Euro	$0.2	$—

A movement of 10% in the U.S. dollar to Australian dollar exchange rate would create an unrealized gain or loss of approximately $39,000. A movement of 10% in the U.S. dollar to Euro exchange rate would create an unrealized gain or loss of approximately $67,000. We had no off balance sheet, or unrecognized, gains and losses in respect of financial instruments used as hedges at the beginning or end of the year ended December 31, 2007. We had no deferred gains or losses during the years ended December 31, 2007, 2006 or 2005.

Inflation

We do not believe that inflation has had a material adverse impact on our business or operating results during the periods presented.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Our consolidated financial statements and the Reports of Ernst & Young LLP, our Independent Registered Public Accounting Firm, are included in this report on Pages F-1 through F-28.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

Item 9A. CONTROLS AND PROCEDURES

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized and reported within the timelines specified in the Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can only provide reasonable assurance of achieving the desired control objectives, and in reaching a reasonable level of assurance, management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As required by Rule 13a-15(b) under the Exchange Act, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the year covered by this report. Based on the foregoing, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of December 31, 2007 to ensure that (a) the information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and (b) such information is accumulated and communicated to our management, including our principal executive officer and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, our management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and our management have concluded that the disclosure controls and procedures are effective at the reasonable assurance level. Because of inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues, if any, within a company have been detected.

Management's Report on Internal Control Over Financial Reporting

Internal control over financial reporting refers to the process designed by, or under the supervision of, our Chief Executive Officer and Chief Financial Officer, and effected by our board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles, and includes those policies and procedures that:

(1) Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets;

(2) Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorization of our management and directors; and

(3) Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Internal control over financial reporting cannot provide absolute assurance of achieving financial reporting objectives because of its inherent limitations. Internal control over financial reporting is a process that involves human diligence and compliance and is subject to lapses in judgment and breakdowns resulting from human failures. Internal control over financial reporting also can be circumvented by collusion or improper management override. Because of such limitations, there is a risk that material misstatements may not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process. Therefore, it is possible to design into the process safeguards to reduce, though not eliminate, this risk. Management is responsible for establishing and maintaining adequate internal control over financial reporting for the company, as defined in Exchange Act Rules 13a-15(f).

Management has used the framework set forth in the report entitled Internal Control-Integrated Framework published by the Committee of Sponsoring Organizations of the Treadway Commission, known as COSO, to evaluate the effectiveness of our internal control over financial reporting as of December 31, 2007. Based on our assessment, management, including our Chief Executive Officer and Chief Financial Officer has concluded that our internal controls over financial reporting was effective as of December 31, 2007. The effectiveness of our internal control over financial reporting as of December 31, 2007 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report which is included herein.

Changes in Internal Control Over Financial Reporting

An evaluation was also performed under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of any change in our internal control over financial reporting that occurred during our last fiscal quarter and that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. That evaluation did not identify any change in our internal control over financial reporting that occurred during our latest fiscal quarter and that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Report of Independent Registered Public Accounting Firm
on Internal Control Over Financial Reporting

The Board of Directors and Stockholders of Sequenom, Inc.

We have audited Sequenom, Inc.'s internal control over financial reporting as of December 31, 2007, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Sequenom Inc.'s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Sequenom, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2007 based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the accompanying consolidated balance sheets of Sequenom, Inc. as of December 31, 2007 and 2006, and the related consolidated statements of operations, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2007 of Sequenom, Inc. and our report dated March 17, 2008 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

San Diego, California
March 17, 2008

Item 9B. OTHER INFORMATION

None

PART III

Certain information required by Part III is omitted from this report because we will file with the Securities and Exchange Commission a definitive proxy statement within 120 days after the end of our fiscal year for our annual meeting of stockholder (the "Proxy Statement"), and the information included in the Proxy Statement is incorporated herein by reference.

Item 10. DIRECTORS, AND EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item is incorporated by reference to our Proxy Statement under the heading "Election of Directors." Information regarding executive officers is set forth in Item 1 of Part 1 of this report and is included herein by reference.

We have adopted a code of business conduct and ethics for directors, officers (including our principal executive, financial and accounting officers) and all employees, which we refer to as our Code of Business Conduct and Ethics. The Code of Business Conduct and Ethics is available on our website at http://www.sequenom.com. Stockholders may request a free copy of our Code of Business Conduct and Ethics from:

Sequenom, Inc.
Attention: Investor Relations
3595 John Hopkins Court
San Diego, CA 92121-1331
(858) 202-9000

If we make any substantive amendments to the code of business conduct and ethics or grant any waiver from a provision of the code to any executive officer or director, we will promptly disclose the nature of the amendment or waiver on our website. We will promptly disclose on our website (i) the nature of any amendment to the policy that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and (ii) the nature of any waiver, including an implicit waiver, from a provision of the policy that is granted to one of these specified individuals, the name of such person who is granted the waiver and the date of the waiver.

Section 16(a) Beneficial Ownership Reporting Compliance

Item 405 of Regulation S-K calls for disclosure of any known late filing or failure by an insider to file a report required by Section 16 of the Exchange Act. This disclosure is incorporated by reference from the information in the section entitled "Section 16(a) Beneficial Ownership Reporting Compliance" in the Proxy Statement.

Item 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated herein by reference from the information in the section entitled "Executive Compensation" in the Proxy Statement.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item is incorporated herein by reference from the information in the sections entitled "Security Ownership of Certain Beneficial Owners and Management" and "Securities Authorized for Issuance under Equity Incentive Compensation Plans" in the Proxy Statement.

Item 13. CERTAIN RELATIONSHIPS, RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information required by this item is incorporated herein by reference from the information in the sections entitled "Certain Transactions" and "Independence of the Board of Directors" in the Proxy Statement.

Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item is incorporated herein by reference from the information in the section entitled "Principal Accountant Fees and Services" in the Proxy Statement.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)(1) *Financial Statements*

The financial statements of Sequenom, Inc. are included herein as required under Item 8 of this report. See Index to Financial Statements on page F-1.

(a)(2) *Financial Statement Schedules*

Schedule II—Valuation and Qualifying Accounts. The other financial statement schedules have been omitted because they are either not required, not applicable, or the information is otherwise included.

(3) *Exhibits*

The exhibits listed below are required by Item 601 of Regulation S-K. Each management contract or compensatory plan or arrangement required to be filed as an exhibit to this report has been identified.

Exhibit Number	Description of Document
3.1[12]	Restated Certificate of Incorporation of the Registrant.
3.2[16]	Restated bylaws of Registrant, as amended.
4.1[12]	Specimen common stock certificate.
10.1[1]	Form of Warrant Agreement between the Registrant and holders of the Series C Preferred Stock warrants.
10.2[12]	Form of Indemnification Agreement between the Registrant and each of its officers and directors.
10.3[1]#	1994 Stock Plan.
10.4[1]#	1994 Stock Plan Form of Non-Qualified Stock Option Grant.
10.5[1]#	1994 Stock Plan Form of Incentive Stock Option Grant.
10.6[1]#	1994 Stock Plan Form of Stock Restriction Agreement.
10.7[1]#	1998 Stock Option/Stock Issuance Plan.
10.8[1]#	1998 Stock Option/Stock Issuance Plan Form of Notice of Grant of Stock Option.
10.9[1]#	1998 Stock Option/Stock Issuance Plan Form of Stock Option Agreement.
10.10[1]#	1998 Stock Option/Stock Issuance Plan Form of Stock Purchase Agreement.
10.11[1]#	1998 Stock Option/Stock Issuance Plan Form of Stock Issuance Agreement.
10.12[17]#	1999 Stock Incentive Plan, as amended.
10.13[1]#	1999 Employee Stock Purchase Plan.
10.14[1]#	1999 Stock Incentive Plan Form of Notice of Grant of Stock Option.
10.15[1]#	1999 Stock Incentive Plan Form of Stock Option Agreement.
10.16[12]#	2006 Equity Incentive Plan.
10.17[12]#	2006 Equity Incentive Plan Form of Notice of Grant of Stock Option.
10.18[12]#	2006 Equity Incentive Plan Form of Stock Option Agreement.

Exhibit Number	Description of Document
10.19[13]#	2006 Equity Incentive Plan Form of Exercise Notice.
10.20[2]	Business Loan Agreement, dated March 3, 2000, between the Registrant and Union Bank of California.
10.21[3]	Building Lease Agreement, dated March 29, 2000, between the Registrant and TPSC IV LLC, a Delaware limited liability company.
10.22[4]#	Employment Agreement between Registrant and Charles Cantor, Ph.D.
10.23[5]#	Exec-U-Care Plan.
10.24[15]#	Employment Agreement, dated July 19, 2004, by and between the Registrant and Clarke Neumann.
10.25[6]*	Diagnostic Platform Benchmarking Study and Evaluation, dated October 25, 2004, by and between the Registrant and Siemens AG.
10.26[6]#	Form of Stock Issuance Agreement under 1999 Stock Incentive Plan.
10.27[7]#	Employment Agreement, dated May 31, 2005, by and between the Registrant and Harry Stylli, Ph.D.
10.28[8]	Amendment Number One to Lease, dated March 29, 2000, by and between the Registrant and TPSC IV LLC dated September 9, 2005.
10.29[8]	Common Stock Warrant, dated September 9, 2005, issued to Kwacker, Ltd.
10.30[8]#	Employment Agreement Amendment, dated September 12, 2005, by and between the Registrant and Dr. Charles R. Cantor.
10.31[9]*	License Agreement, dated October 14, 2005, by and between the Registrant and Isis Innovation Limited.
10.32[10]	Amended and Restated Securities Purchase Agreement, dated March 30, 2006, by and among the registrant, ComVest Investment Partners II LLC, LB I Group Inc., Pequot Private Equity Fund IV, L.P. and Siemens Venture Capital GmbH.
10.33[10]	Form of Warrant issued pursuant to the Amended and Restated Securities Purchase Agreement dated March 30, 2006.
10.34[11]#	Letter agreement dated April 6, 2006, by and between the Registrant and John E. Lucas.
10.35[12]	Registration Rights Agreement dated June 6, 2006 by and between the Registrant, ComVest Investment Partners II LLC, LB I Group Inc., Pequot Private Equity Fund IV, L.P. and Siemens Venture Capital GmbH.
10.36[13]#	Letter agreement dated August 21, 2006, by and between the Registrant and Paul W. Hawran.
10.37[14]*	Amendment to Exclusive License of Technology Agreement dated October 19, 2006, by and between the Registrant and ISIS Innovation Limited.
10.38[14]*	Supply Agreement dated November 3, 2006, by and between the Registrant and Bruker Daltonics Inc.
10.39[17]#	Form of Restricted Stock Bonus Grant Notice under 2006 Equity Incentive Plan.
10.40[17]#	Form of Restricted Stock Bonus Agreement under 2006 Equity Incentive Plan.
10.41[18]	Letter agreement dated February 14, 2007, by and between the Registrant and Paul Hawran

Exhibit Number	Description of Document
10.42[18]*	Collaboration and License Agreement dated January 24, 2007, between the Registrant and Lenetix Medical Screening Laboratory, Inc.
10.43[19]	Placement Agency Agreement dated April 25, 2007, between the Registrant and Lehman Brothers Inc.
10.44[20]	Letter agreement dated June 25, 2007, by and between the Registrant and Kathleen Wiltsey.
10.45[20]	Letter agreement dated July 2, 2007, by and between the Registrant and Richard Alan Lerner, M.D.
10.46[21]	Form of Purchase Agreement, dated October 25, 2007, by and between the registrant and the various purchasers of shares of the Registrant's common stock.
10.47[22]*	Amendment to Exclusive License of Technology Agreement dated November 5, 2007, by and between the Registrant and ISIS Innovation, Limited.
10.48#	2008 Executive Officer Bonus Program.
10.49#	Non-Employee Director Compensation Policy.
21.1[15]	Subsidiaries of the Registrant.
23.1	Consent of Independent Registered Public Accounting Firm.
31.1	Certification of Principal Executive Officer pursuant to Rule13a-14(a) and Rule 15d-14(a) of the Securities and Exchange Act, as amended.
31.2	Certification of Principal Financial Officer pursuant to Rule13a-14(a) and Rule 15d-14(a) of the Securities and Exchange Act, as amended.
32.1	Certification of Principal Executive Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Principal Financial Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

\# Management contract or compensatory plan.

* Certain confidential portions of this Exhibit have been omitted pursuant to a request for confidential treatment. Omitted portions have been filed separately with the Securities and Exchange Commission.

(1) Incorporated by reference to the Registrant's Registration Statement on Form S-1 (No. 333-91665), as amended.

(2) Incorporated by reference to the Registrant's Annual Report on Form 10-K for the year ended December 31, 1999.

(3) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2000.

(4) Incorporated by reference to the Registrant's Registration Statement on Form S-1 (No. 333-91665), as amended, which exhibit is hereby supplemented with an additional Schedule A filed with the Registrant's Annual Report on Form 10-K for the year ended December 31, 2000.

(5) Incorporated by reference to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2003.

(6) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2004.

(7) Incorporated by reference to the Registrant's Current Report on Form 8-K filed June 1, 2005.

(8) Incorporated by reference to the Registrant's Current Report on Form 8-K filed September 14, 2005.

(9) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2005.

(10) Incorporated by reference to the Registrant's Current Report on Form 8-K filed April 3, 2006.
(11) Incorporated by reference to the Registrant's Current Report on Form 8-K filed April 10, 2006.
(12) Incorporated by reference to the Registrant's Current Report on Form 8-K filed June 6, 2006.
(13) Incorporated by reference to the Registrant's Current Report on Form 8-K filed August 25, 2006.
(14) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2006.
(15) Incorporated by reference to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2005.
(16) Incorporated by reference to the Registrant's Current Report on Form 8-K filed December 7, 2007.
(17) Incorporated by reference to the Registrant's Current Report on Form 8-K filed January 24, 2007.
(18) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2007.
(19) Incorporated by reference to the Registrant's Current Report on Form 8-K filed April 25, 2007.
(20) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2007.
(21) Incorporated by reference to the Registrant's Current Report on Form 8-K filed October 26, 2007.
(22) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2007.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: March 17, 2008

SEQUENOM, INC.

By: /s/ HARRY STYLLI
Harry Stylli
President and Chief Executive Officer

POWER OF ATTORNEY

Know all men by these presents, that each person whose signature appears below constitutes and appoints Harry Stylli and Paul Hawran, and each of them, as his attorneys-in-fact and agents, each with power of substitution in any and all capacities, to sign any amendments to this annual report on Form 10-K, and to file the same with exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that the attorney-in-fact or his substitute or substitutes may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant in the capacities and on the dates indicated.

Signature	Title	Date
/s/ HARRY STYLLI PH.D. **Harry Stylli, Ph.D.**	President and Chief Executive Officer and Director (Principal Executive Officer)	March 17, 2008
/s/ PAUL HAWRAN **Paul Hawran**	Chief Financial Officer (Principal Financial and Accounting Officer)	March 17, 2008
/s/ CHARLES R. CANTOR, PH.D. **Charles R. Cantor, Ph.D.**	Chief Scientific Officer and Director	March 17, 2008
/s/ HARRY F. HIXSON, JR., PH.D. **Harry F. Hixson, Jr., Ph.D.**	Chairman of the Board of Directors	March 17, 2008
/s/ ERNST-GUNTER AFTING, PH.D., M.D. **Ernst-Gunter Afting, Ph.D., M.D.**	Director	March 17, 2008
/s/ JOHN FAZIO **John Fazio**	Director	March 17, 2008
/s/ RICHARD LERNER, M.D. **Richard Lerner, M.D.**	Director	March 17, 2008
/s/ RONALD M. LINDSAY, PH.D. **Ronald M. Lindsay, Ph.D.**	Director	March 17, 2008
/s/ KATHLEEN WILTSEY **Kathleen Wiltsey**	Director	March 17, 2008

SEQUENOM, INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders
Sequenom, Inc.

We have audited the accompanying consolidated balance sheets of Sequenom, Inc. as of December 31, 2007 and 2006, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2007. Our audits also included the financial statement schedule listed in the Index at Item 15(a)(2). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Sequenom, Inc. at December 31, 2007 and 2006, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2007, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

As discussed in Note 2 to the consolidated financial statements, effective January 1, 2006, Sequenom, Inc. changed its method of accounting for share-based payments in accordance with Statement of Financial Accounting Standards No. 123 (revised) "Share-Based Payment."

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Sequenom, Inc.'s internal control over financial reporting as of December 31, 2007, based on the criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 17, 2008, expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

San Diego, California
March 17, 2008

SEQUENOM, INC.

CONSOLIDATED BALANCE SHEETS
(In thousands, except share and per share information)

	December 31, 2007	December 31, 2006
Assets		
Current assets:		
Cash and cash equivalents	$ 13,116	$ 1,932
Marketable securities	37,704	22,996
Restricted cash	1,330	1,402
Accounts receivable, net	10,957	4,834
Inventories, net	4,191	2,567
Other current assets and prepaid expenses	1,094	677
Total current assets	68,392	34,408
Equipment and leasehold improvements, net	5,959	4,528
Intangible assets	79	360
Marketable securities	929	—
Other assets	687	585
Total assets	$ 76,046	$ 39,881
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 8,408	$ 3,809
Accrued expenses	5,760	5,140
Accrued acquisition and integration costs	237	230
Deferred revenue	873	1,578
Current portion of asset-backed loan	424	—
Total current liabilities	15,702	10,757
Deferred revenue, less current portion	335	149
Other long-term liabilities	4,437	2,804
Long-term portion of asset-backed loan	823	—
Long-term accrued acquisition and integration costs, less current portion	484	721
Commitments and contingencies		
Stockholders' equity:		
Convertible preferred stock, par value $0.001; authorized shares—5,000,000.	—	—
Common stock, par value $0.001; authorized shares—185,000,000; issued and outstanding shares 44,888,656 and 33,439,634 at December 31, 2007 and 2006, respectively	44	33
Additional paid-in capital	536,022	484,898
Accumulated other comprehensive income	319	656
Accumulated deficit	(482,120)	(460,137)
Total stockholders' equity	54,265	25,450
Total liabilities and stockholders' equity	$ 76,046	$ 39,881

See accompanying notes.

SEQUENOM, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except per share information)

	Years ended December 31,		
	2007	2006	2005
Revenues:			
Consumables	$ 16,530	$ 12,930	$ 11,007
MassARRAY and other product related	20,835	14,121	8,063
Services	3,524	1,023	—
Research and other	113	422	351
Total revenues	41,002	28,496	19,421
Costs and expenses:			
Cost of consumable and product revenue	14,594	11,369	10,370
Cost of service revenue	3,483	518	—
Research and development	14,352	11,939	11,930
Selling and marketing	17,015	10,993	11,016
General and administrative	14,133	11,432	11,366
Restructuring and long-lived asset impairment charge	—	10	593
Amortization of acquired intangibles	—	1,511	2,014
Total costs and expenses	63,577	47,772	47,289
Loss from operations	(22,575)	(19,276)	(27,868)
Interest income	1,781	906	633
Realized loss on marketable securities	(1,071)	—	—
Interest expense	(17)	(20)	(325)
Other (expense) income, net	(101)	191	94
Loss before income tax	(21,983)	(18,199)	(27,466)
Deferred income tax benefit	—	622	929
Net loss	$(21,983)	$(17,577)	$(26,537)
Net loss per share, basic and diluted	$ (0.57)	$ (0.71)	$ (2.00)
Weighted average shares outstanding, basic and diluted	38,865	24,842	13,276

See accompanying notes.

SEQUENOM, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(In thousands, except share information)

	Common Stock		Additional Paid-In Capital	Deferred Compensation	Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount					
Balance at December 31, 2004	13,465,962	$ 13	$453,926	$(565)	$ 721	$(416,023)	$ 38,072
Net loss	—	—	—	—	—	(26,537)	(26,537)
Unrealized gain on available-for-sale securities	—	—	—	—	93	—	93
Translation adjustment	—	—	—	—	(372)	—	(372)
Comprehensive loss	—	—	—	—	—	—	(26,816)
Other than temporary loss on investments	—	—	—	—	25	—	25
Exercise of stock options	17,469	—	16	—	—	—	16
Purchases under Employee Stock Purchase Plan	20,778	—	57	—	—	—	57
Restricted stock cancellations	(94,667)	—	(256)	256	—	—	—
Issuance of stock options and warrants to third parties	—	—	80	—	—	—	80
Amortization of restricted stock	—	—	—	309	—	—	309
Balance at December 31, 2005	13,409,542	$ 13	$453,823	$ —	$ 467	$(442,560)	$ 11,743
Net loss	—	—	—	—	—	(17,577)	(17,577)
Unrealized loss on available-for-sale securities	—	—	—	—	(1)	—	(1)
Translation adjustment	—	—	—	—	190	—	190
Comprehensive loss	—	—	—	—	—	—	(17,388)
Share-based compensation	—	—	1,169	—	—	—	1,169
Exercise of stock options	13,434	—	45	—	—	—	45
Purchases under Employee Stock Purchase Plan	16,773	—	26	—	—	—	26
Issuance of common stock and warrants, net of issuance costs	19,999,885	20	29,835	—	—	—	29,855
Balance at December 31, 2006	33,439,634	$ 33	$484,898	$ —	$ 656	$(460,137)	$ 25,450
Net loss	—	—	—	—	—	(21,983)	(21,983)
Unrealized loss on available-for-sale securities	—	—	—	—	(804)	—	(804)
Translation adjustment	—	—	—	—	467	—	467
Comprehensive loss	—	—	—	—	—	—	(22,320)
Share-based compensation	—	—	3,058	—	—	—	3,058
Exercise of stock options	165,536	—	446	—	—	—	446
Exercise of warrants	1,197,012	1	1,255	—	—	—	1,256
Purchases under Employee Stock Purchase Plan	36,473	—	102	—	—	—	102
Issuance of common stock and warrants, net of issuance costs	10,050,001	10	46,263	—	—	—	46,273
Balance at December 31, 2007	44,888,656	$ 44	$536,022	$ —	$ 319	$(482,120)	$ 54,265

See accompanying notes.

SEQUENOM, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Years ended December 31,		
	2007	2006	2005
Operating activities			
Net loss	$(21,983)	$(17,577)	$(26,537)
Adjustments to reconcile net loss to net cash used in operating activities:			
Stock-based compensation	3,058	1,169	12
Amortization of deferred compensation	—	—	311
Depreciation and amortization	1,940	3,569	5,039
Realized loss on marketable securities	1,071	—	—
Loss on disposal of fixed assets	—	65	185
Bad debt expense	142	103	—
Deferred taxes	—	(697)	(929)
Deferred rent	1,631	2,356	—
Other non-cash items	462	650	—
Changes in operating assets and liabilities:			
Accounts receivable	(6,044)	(2,505)	612
Inventories	(1,565)	1,710	1,030
Other current assets and prepaid expenses	(396)	83	(280)
Other assets	(107)	8	78
Accounts payable and accrued expenses	4,975	412	455
Deferred revenue	(554)	202	161
Other liabilities	(52)	(283)	657
Net cash used in operating activities	(17,422)	(10,735)	(19,206)
Investing activities			
Purchase of equipment, leasehold improvements, and intangible assets	(3,513)	(1,229)	(2,164)
Restricted cash	75	1,243	7,289
Purchases of marketable securities	(70,781)	(32,160)	(1,490)
Sales of marketable securities	49,648	10,646	9,873
Maturities of marketable securities	5,621	2,676	12,003
Purchase of long-term marketable securities	(2,000)	—	—
Net cash (used in) provided by investing activities	(20,950)	(18,824)	25,511
Financing activities			
Repayment of long-term debt	(70)	(200)	(7,474)
Proceeds from long-term debt	1,318	—	—
Payments on capital lease obligations	—	(193)	(402)
Proceeds from issuance of common stock and warrants, net of issuance costs	46,273	29,855	—
Proceeds from exercise of warrants, stock options and Employee Stock Purchase Plan purchases	1,803	71	73
Net cash provided by (used in) financing activities	49,324	29,533	(7,803)
Net increase (decrease) in cash and cash equivalents	10,952	(26)	(1,498)
Effect of exchange rate changes on cash and cash equivalents	232	73	(206)
Cash and cash equivalents at beginning of year	1,932	1,885	3,589
Cash and cash equivalents at end of year	$ 13,116	$ 1,932	$ 1,885
Supplemental disclosure of cash flow information:			
Interest paid	$ 12	$ 20	$ 325

See accompanying notes.

1. Nature of the Business

We are a genetics and molecular diagnostics company committed to providing genetic analysis products and services, as well as diagnostic tests initially targeted at non-invasive genetic disorders. Our genetic analysis business provides applications that translate genomic science into superior solutions for biomedical research, agricultural, and molecular medicine applications and diagnostic applications including non-invasive prenatal diagnostics. Our proprietary MassARRAY system is a high performance DNA analysis platform that quantitatively and precisely measures the amount of genetic target material and variations therein. The system is able to deliver reliable and specific data from complex biological samples and from genetic target material that is available only in trace amounts. We have used our MassARRAY technology and our extensive collections of DNA samples from diseased and healthy individuals to identify disease-related genes that predispose significant portions of the population to major diseases. Based on our discoveries, we have developed diagnostic and therapeutic content for potential partner out-licensing and commercial development opportunities.

2. Summary of Significant Accounting Policies and Significant Accounts

Reverse Stock Split

On May 31, 2006, in conjunction with our annual meeting of stockholders, our stockholders approved amendments to our certificate of incorporation to effect a reverse stock split of our common stock and to increase the number of authorized shares of common stock to 185,000,000. On June 1, 2006, we completed a 1-for-3 reverse stock split of our common stock. Accordingly, all share, warrant, option and per share information for all periods presented has been restated to account for the effect of the reverse stock split.

Basis of Presentation and Consolidation

The accompanying consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles (GAAP) and include the accounts of Sequenom, Inc. and our wholly-owned subsidiaries located in Germany, the United Kingdom and India. All significant intercompany accounts and transactions are eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires us to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Accrued Acquisition and Integration Costs

To the extent that exact amounts were not determinable at the time of acquisition, we estimated amounts for direct costs of the acquisition of Gemini Genomics and Axiom Biotechnologies and the related integration costs in accordance with EITF 95-3, "Recognition of Liabilities in Connection with a Purchase Business Combination." Amounts accrued relating to acquisition and integration costs totaled $27.4 million and as of December 31, 2007 approximately $0.7 million remained accrued. The amount accrued at December 31, 2007, represents all remaining lease payments, net of estimated income from subleased space. If we do not receive all the amounts due to us under non-cancelable subleases, we will incur additional expense.

Impairment of Long-lived Assets

We periodically re-evaluate the original assumptions and rationale utilized in the establishment of the carrying value and estimated lives of our long-lived assets in accordance with Statement of Financial Accounting Standards (SFAS) No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets.". The criteria used for these evaluations include management's estimate of the asset's continuing ability to generate income from operations and positive cash flows in future periods as well as the strategic significance of any intangible assets in our business objectives. If assets are considered to be impaired, the impairment recognized is the amount by which the carrying value of the assets exceeds the fair value of the assets.

Reserves for Obsolete and Slow-moving Inventory

We operate in an industry characterized by rapid improvements and changes to our technology and products. The introduction of new products by us or our competitors can result in our inventory being rendered obsolete or requiring us to sell items at a discount to cost. We estimate the recoverability of our inventory by reference to our internal estimates of future demands and product life cycles. If we incorrectly forecast demand for our products or inadequately manage the introduction of new product lines, we could materially impact our consolidated financial statements by having excess inventory on hand. Our future estimates are subjective and could be incorrect. During 2007, slow-moving inventory reserves of $0.2 million were charged against cost of goods sold and the total reserve was $1.1 million at December 31, 2007.

Shipping and Handling Costs

Shipping and handling costs are included within cost of product revenue on the statement of operations.

Cash and Cash Equivalents

Cash equivalents consist of short-term, highly liquid investments with maturities at date of purchase of three months or less.

Marketable Securities

The Company accounts for marketable securities in accordance with SFAS No. 115, "Accounting for Certain Investments in Debt and Equity Securities." The Company determined the appropriate classification of marketable securities was "available-for-sale" at the time of purchase. As such, at December 31, 2007 and 2006, all of the Company's investments in marketable securities were reported at fair value. Fair value is determined based on observable market quotes or valuation models using assessments of counterparty credit worthiness, credit default risk or underlying security and overall capital market liquidity. Declines in fair value that are considered other-than-temporary are charged to earnings and those that are considered temporary are reported as a component of accumulated other comprehensive income (OCI) in stockholders' equity. The Company uses the specific identification method of determining the cost basis in computing realized gains and losses on the sale of its available-for-sale securities.

Historically we have invested in auction rate securities, commercial paper of prime quality, certificates of deposit, guaranteed bankers acceptance and U.S. Government instruments, and by policy, limit the amount of credit exposure to any one issuer. At December 31, 2007, approximately $20.9 million of principal was invested in auction rate securities (ARS). The ARS held are private placement securities with various long-term nominal maturities with interest rates reset through a dutch auction each month, except for one ARS that resets every 92 days. The monthly auctions historically have provided a liquid market for these securities. The investments in

ARS represent interests in collateralized debt obligations supported by insurance securitizations and other structured credits, including corporate bonds and to a lesser degree, pools of residential and commercial mortgages. Subsequent to year end, we have liquidated all but $9.4 million of auction rate securities.

Consistent with the Company's investment policy guidelines, the ARS investments held by the Company all had AAA/AA credit ratings at the time of purchase. With the liquidity issues experienced in global credit and capital markets, the $9.4 million ARS held by the Company at December 31, 2007 have experienced multiple failed auctions as the amount of securities submitted for sale has exceeded the amount of purchase orders and we have been unable to liquidate. All of these securities retained at least a rating of AAA/AA as of December 31, 2007. Subsequent to year end, one of our ARS investments was downgraded to a credit rating of Baaa3.

The estimated market value of all ARS holdings at December 31, 2007 was $19.0 million, which reflects a $1.9 million adjustment to the principal value of $20.9 million. Although the ARS continue to pay interest according to their stated terms, based on valuation models and an analysis of other-than-temporary impairment factors, we recognized a realized loss of approximately $1.1 million in the fourth quarter of 2007, reflecting the portion of ARS holdings that we have concluded have an other-than-temporary decline in value. In addition, we recorded an unrealized loss of approximately $0.8 million in accumulated OCI as a reduction in shareholders' equity, reflecting adjustments to ARS holdings that the Company has concluded have a temporary decline in value.

Given the failed auctions, its subsequent to year end decline in credit rating to Baaa3, or until there is a successful auction for the ARS that has been identified as having an other-than-temporary decline in value the ARS investment has been reclassified to non-current marketable securities available-for-sale of $0.9 million at December 31, 2007. Currently, we do not have a need to access these funds for operational purposes in 2008.

At December 31, 2007, short-term investments, including restricted investments, consisted of the following:

	Amortized Cost	Unrealized Gain	Unrealized (Loss)	Market Value
		(In thousands)		
Short-term—auction rate securities	$18,913	$—	$(824)	$18,089
Cash equivalents	9,037	—	(11)	9,026
Corporate bonds	7,481	—	(4)	7,477
Corporate notes	2,066	27	—	2,092
United States government agencies	1,011	8	—	1,020
Total short-term marketable securities	$38,508	$ 35	$(839)	$37,704

At December 31, 2007, all of our investments in auction-rate securities have contractual maturity dates past 2025. However, they provide liquidity to us every ninety days or less when interest rates reset through a dutch auction process.

At December 31, 2006, short-term investments consisted of the following:

	Amortized Cost	Unrealized Gain	Unrealized (Loss)	Market Value
		(In thousands)		
Auction rate securities	$22,996	$—	$—	$22,996
Total short-term investments	$22,996	$—	$—	$22,996

Restricted Cash

Restricted cash and investments of $1.3 million as of December 31, 2007 are held in interest bearing cash accounts with restrictions of withdrawal, in support of certain borrowing agreements and stand-by letters of credit. Restricted cash totaled $1.4 million at December 31, 2006.

Concentration of Risks

We grant credit generally on an unsecured basis to customers throughout North America, Europe, and Asia. We establish an allowance for doubtful accounts based upon factors surrounding the credit risk of specific customers, historical trends, and other information. To reduce credit risk, certain sales are secured by letters of credit from commercial banks. The regional concentration of accounts receivables were as follows:

Region	December 31, 2007	Percent of receivable balance	December 31, 2006	Percent of receivable balance
	(In thousands)			
Europe	$ 2,748	25%	$1,264	26%
Asia	2,063	19%	1,230	26%
North America	6,146	56%	2,340	48%
Total	$10,957	100%	$4,834	100%

Our Asia-based major distributors represented $7.9 million and $4.7 million, or 22% and 17% of our total product revenues during the year ended December 31, 2007 and 2006, respectively. No Asia-based distributor had a year end accounts receivable balance greater than 4% of the total balance outstanding at December 31, 2007. During 2007, consumables revenue for one customer in the United States represented 10% of total world-wide consumables revenue.

Our products incorporate components that are available from only one or a limited number of suppliers. Many of these components are manufactured with lead times, which can be significant. Shortages of various essential materials could occur due to interruption of supply. If we were unable to procure certain such components from suppliers or sub-contractors, it could affect our ability to meet demand for our products, which would have an adverse effect upon our results.

Inventories

Inventories are stated at the lower of cost (first-in, first-out) or market value. Standard cost, which approximates actual cost, is used to value inventories. The components of inventories were as follows:

	December 31,	
	2007	2006
	(In thousands)	
Raw materials	$3,053	$1,635
Work in process	—	51
Finished goods	1,138	881
Total	$4,191	$2,567

Inventories are shown net of excess and obsolescence reserves of $1.1 million and $1.1 million at December 31, 2007 and 2006, respectively.

Equipment and Leasehold Improvements

Equipment is stated at cost and depreciated using the straight-line method over the estimated useful lives of the assets (generally 3 to 5 years, or the lease term, whichever is shorter). Leasehold improvements are amortized using the straight-line method over the estimated useful life of the improvement or the remaining term of the lease, whichever is shorter. The maximum estimated useful life of any leasehold improvement is 15 years from the completion of the improvement.

Equipment and leasehold improvements and related accumulated depreciation and amortization were as follows (In thousands):

	December 31,	
	2007	2006
Laboratory equipment	$ 14,545	$ 12,688
Leasehold improvements	4,470	4,280
Office furniture and equipment	6,261	5,150
	25,276	22,118
Less accumulated depreciation and amortization	(19,317)	(17,590)
	$ 5,959	$ 4,528

Depreciation expense for the years ended December 31, 2007, 2006 and 2005 was $1.7 million, $1.6 million, and $2.6 million, respectively.

Intangible Assets

Intangible assets consisted of the following (In thousands):

		December 31, 2007		December 31, 2006	
	Weighted Average Life	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Clinical data collections	5	$13,552	$(13,552)	$13,552	$(13,552)
Purchased patent rights and licenses	5	4,449	(4,370)	4,449	(4,089)
Total		$18,001	$(17,922)	$18,001	$(17,641)

Amortization of intangible assets for the years ended December 31, 2007, 2006 and 2005 was $0.3 million, $2.0 million, and $2.4 million, respectively. Estimated aggregate amortization expense for the next five years is as follows (In millions):

Year ended December 31,	
2008	$ 0.1
Thereafter	—
	$ 0.1

Warranty Cost and Reserves

In accordance with FIN 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others", we provide a warranty provision related to the sales of our MassARRAY equipment based on our experience of returns and repairs required under the warranty period.

We generally provide a one-year warranty on our MassARRAY Compact system and related equipment. We establish an accrual for estimated warranty expenses associated with system sales based on historical amounts. This expense is recorded as a component of cost of product revenue.

Changes in our warranty liability during the three years ended December 31, 2007 are as follows (in thousands):

Balance as of December 31, 2004	$ 305
Additions charged to cost of revenues	512
Repairs and replacements	(412)
Balance as of December 31, 2005	$ 405
Additions charged to cost of revenues	939
Repairs and replacements	(664)
Balance as of December 31, 2006	$ 680
Additions charged to cost of revenues	314
Repairs and replacements	(468)
Balance as of December 31, 2007	$ 526

Fair Value of Financial Instruments

Financial instruments, including cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities, are carried at cost, which management believes approximates fair value because of the short-term maturity of these instruments.

Accounts Receivable

Trade accounts receivable are recorded at net invoice values. The Company considers receivables past due based on the contractual payment terms. The Company reviews its exposure to amounts receivable and reserves specific amounts if collectibility is no longer reasonably assured. The Company also reserves a percentage of its trade receivable balance based on collection history. The Company re-evaluates such reserves on a regular basis and adjusts its reserves as needed.

Revenue Recognition

We recognize revenue in accordance with current accounting rules, which primarily include the Securities and Exchange Commission's Staff Accounting Bulletin, or SAB, No. 104, "Revenue Recognition." In accordance with SAB No. 104, revenues are recognized, when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed and determinable and collectibility is reasonably assured. We consider EITF 00-21, "Accounting for Revenue Arrangements with Multiple Deliverables", and for MassARRAY system sales, the arrangement consideration is allocated among the separate units of accounting based on their relative fair values. The separate units of accounting are typically the system and software itself and maintenance contracts sold at the time of the system sale. Revenue is deferred for fees

received before earned. Revenues from sales of consumables are recognized generally upon shipment and transfer of title to the customer. Revenue from sales of MassARRAY systems with standard payment terms of net 30 days are recognized upon shipment and transfer of title to the customer or when all revenue recognition criteria are met. Our contracts do not contain refund or cancellation clauses. Revenues from the sale or licensing of our proprietary software are recognized upon transfer of title to the customer. We recognize revenue on maintenance services for ongoing customer support over the maintenance period. Revenues from genetic services are recognized at the completion of key stages in the performance of the service, which is generally delivery of single nucleotide polymorphism (SNP) assay information. Grant revenue is recorded as the research expenses relating to the grants are incurred, provided that the amounts received are not refundable if the research is not successful. Amounts received that are refundable if the research is not successful would be recorded as deferred revenue and recognized as revenue upon the grantor's acceptance of the success of the research results.

Research and Development Costs

Research and development costs are expensed as incurred. These costs include personnel expenses, fees paid to collaborators, laboratory supplies, facilities, miscellaneous expenses and allocation of corporate costs. These expenses are incurred during proprietary research and development activities, as well as providing services under collaborative research agreements and grants.

Foreign Currency Translation and Transactions

The financial statements of the our German, United Kingdom and Indian subsidiaries are measured using, respectively, the Euro ("EUR"), Great British pound ("GBP") and Rupee ("INR"), as the functional currency. Assets and liabilities of these subsidiaries are translated at the rates of exchange at the balance sheet date. Income and expense items are translated at the average daily rate of exchange during the reporting period. Resulting remeasurement gains or losses are recognized as a component of other comprehensive income. Transactions denominated in currencies other than the local currency are recorded based on exchange rates at the time such transactions arise. Subsequent changes in exchange rates result in transaction gains and losses, which are reflected in income as unrealized (based on period-end translations) or realized upon settlement of the transaction. Transaction gains or losses were not material for the years ended December 31, 2007, 2006, and 2005.

Income Taxes

In accordance with SFAS No. 109, *Accounting for Income Taxes*, the provision for income taxes is computed using the asset and liability method, under which deferred tax assets and liabilities are recognized for the expected future tax consequences of temporary differences between the financial reporting and tax bases of assets and liabilities, and for the expected future tax benefit to be derived from tax loss and credit carryforwards. Deferred tax assets and liabilities are determined using the enacted tax rates in effect for the years in which those tax assets are expected to be realized. A valuation allowance is established when it is more likely than not the future realization of all or some of the deferred tax assets will not be achieved. The evaluation of the need for a valuation allowance is performed on a jurisdiction by jurisdiction basis, and includes a review of all available positive and negative evidence. As of December 31, 2007, we have maintained a valuation allowance against U.S. and foreign deferred tax assets that we concluded have not met the "more likely than not" threshold required under SFAS No. 109.

Due to the adoption of SFAS No. 123(R), we recognize excess tax benefits associated with share-based compensation to stockholders' equity only when realized. When assessing whether excess tax benefits relating to share-based compensation have been realized, we follow the with-and-without approach, excluding any indirect effects of the excess tax deductions. Under this approach, excess tax benefits related to share-based compensation are not deemed to be realized until after the utilization of all other tax benefits available to us.

Effective January 1, 2007, we adopted FASB Interpretation (FIN) No. 48, *Accounting for Uncertainty in Income Taxes — an interpretation of FASB Statement No. 109*, which clarifies the accounting for uncertainty in tax positions. FIN No. 48 requires that we recognize the impact of a tax position in our financial statements only if that position is more likely than not of being sustained upon examination by taxing authorities, based on the technical merits of the position. Any interest and penalties related to uncertain tax positions will be reflected in income tax expense.

Stock-based Compensation

Effective January 1, 2006, the benefits provided under our share-based compensation plans are subject to the provisions of SFAS No. 123(R), "Share-Based Payment." Prior to January 1, 2006, we accounted for share-based compensation related to stock options under the recognition and measurement principles of Accounting Principles Board Opinion No. 25. Therefore, we measured compensation expense for our stock options using the intrinsic value method, which is, as the excess, if any, of the fair market value of our stock at the grant date over the amount required to be paid to acquire the stock, and provided the pro forma disclosures required by SFAS 123. We elected to use the modified prospective method application in adopting SFAS 123(R) and therefore have not restated results for prior periods. The valuation provisions of SFAS 123(R) apply to new awards and to awards that are outstanding on the adoption date and subsequently modified or cancelled.

As a result of the adoption of SFAS 123(R), our net loss for the year ended December 31, 2007 includes $3.1 million of compensation expense related to our share-based compensation awards. The compensation expense is recorded as components of research and development expense ($0.5 million), selling and marketing expense ($0.6 million) and general and administrative expense ($2.0 million). Also as a result of the adoption of SFAS 123R, our net loss for the year ended December 31, 2006 includes $1.2 million of compensation expense related to our share-based compensation awards. The compensation expense is recorded as components of research and development expense ($0.3 million), selling and marketing expense ($0.2 million) and general and administrative expense ($0.7 million). SFAS 123(R) requires that cash flows resulting from tax deductions in excess of the cumulative compensation cost recognized for options exercised (excess tax benefits) be classified as cash inflows from financing activities and cash outflows from operating activities. Due to our net loss position, no tax benefits have been recognized in the consolidated statements of cash flows.

We have not recognized, and do not expect to recognize in the near future, any tax benefit related to stock-based compensation cost as a result of the full valuation allowance of our net deferred tax assets and our net operating loss carryforwards.

For stock options granted prior to the adoption of SFAS 123(R), the following table illustrates the pro forma effect on net loss and loss per common share as if we had applied the fair value recognition provisions of SFAS 123 in determining share-based compensation for stock option awards under the plan for the year ended December 31, 2005:

	2005 (In thousands, except per share information)
Net loss as reported	$(26,537)
Add: Stock-based compensation expense included in reported net loss	311
Deduct: Stock-based employee compensation expense determined under fair value based method for all awards	(1,636)
Pro forma net loss	$(27,862)
Net loss per share, basic and diluted, as reported	$ (2.00)
Pro forma net loss per share, basic and diluted	$ (2.10)

We account for options granted to non-employees in accordance with EITF No. 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services*, and SFAS No. 123(R). The fair value of these options at the measurement dates was estimated using the Black-Scholes pricing model. Total stock-based compensation for options granted to non-employees for the year ended December 31, 2007, 2006 and 2005, was $128,000, $0 and $0, respectively, and is included in general and administrative, research and development and selling and marketing expenses, totaling $39,000, $24,000 and $65,000, respectively, in the statement of operations for 2007.

Comprehensive Income (Loss)

In accordance with SFAS No. 130, "Reporting Comprehensive Income," unrealized gains or losses on our available-for-sale securities and foreign currency translation adjustments are included in other comprehensive income (loss).

Net Loss Per Share

In accordance with SFAS No. 128, "Earnings Per Share," basic net loss per share is computed by dividing the net loss for the period by the weighted average number of common shares outstanding during the period. Diluted net loss per share is computed by dividing the net loss for the period by the weighted average number of common and common equivalent shares outstanding during the period. Common stock equivalents consisting of stock options, warrants and restricted stock were not included in the computation of diluted net loss per share as their effect was anti-dilutive for all periods presented.

Reclassifications

Certain amounts in the prior year financial statements have been reclassified to conform to the current year presentation.

Recent Accounting Pronouncements

In February 2007, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities—Including an Amendment of FASB Statement No. 115" (SFAS No. 159), which provides companies with an option to report selected financial assets and liabilities at fair value. The objective of SFAS No. 159 is to reduce both the complexity in accounting for financial instruments and the volatility in earnings caused by measuring related assets and liabilities differently. SFAS No. 159 also establishes presentation and disclosure requirements designed to facilitate comparisons between companies that choose different measurement attributes for similar types of assets and liabilities. SFAS No. 159 is effective for fiscal years beginning after November 15, 2007, with earlier adoption permitted. We are currently in the process of determining the impact, if any, of adopting the provisions of SFAS No. 159 on our results of operations.

In June 2007, the FASB ratified Emerging Issues Task Force Issue (EITF) No. 07-3, "Accounting for Nonrefundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities" (EITF No. 07-3). EITF No. 07-3 requires that nonrefundable advance payments for goods and services that will be used or rendered in future research and development activities pursuant to executory contractual arrangements be deferred and recognized as an expense in the period that the related goods are delivered or services are performed. We will adopt EITF No. 07-3 as of January 1, 2008, and it is not expected to have a material impact on our results of operations or financial position.

SFAS No. 141(R), Business Combinations, was issued in December of 2007. SFAS No. 141(R) established principles and requirements for how the acquirer of a business recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed, and any non-controlling interest in the acquiree. SFAS No. 141(R) also provides guidance for recognizing and measuring the goodwill acquired in the business combination and determines what information to disclose to enable users of the financial statements to evaluate the nature and financial effects of the business combination. The guidance will become effective for fiscal years beginning after December 15, 2008. The Company does not expect the adoption of this pronouncement to have a material impact on the Company's consolidated financial statements.

3. Segment Reporting

SFAS No. 131, "Disclosures About Segments of an Enterprise and Related Information", requires the use of a management approach in identifying segments of an enterprise. All of our activities are now operated within one business segment and accordingly we report the consolidated results of our activities without segmental disclosure.

4. Acquisition and Integration Costs

As of December 31, 2007, we had $0.7 million remaining in accrued acquisition costs, relating to the acquisition of Gemini Genomics in 2001, comprising facility exit costs. We have subleased all of our surplus space within this facility and received sub-lease income, which we set against lease expense, of $0.3 million, $0.2 million, and $0.2 million for the years ended December 31, 2007, 2006 and 2005, respectively. If we do not receive all the amounts due to us under non-cancelable subleases, we will incur additional lease expense.

The activity in the years ended December 31, 2007 and 2006, respectively, was as follows (in millions):

	Balance at December 31, 2006	Increase in accrual	Deductions	Balance at December 31, 2007
Costs to close facilities and exit lease commitments	$1.0	$—	$(0.3)	$0.7

	Balance at December 31, 2005	Increase in accrual	Deductions	Balance at December 31, 2006
Costs to close facilities and exit lease commitments	$1.2	$—	$(0.2)	$1.0

6. Asset-backed Loan

On August 31, 2007, we signed an amendment to our existing asset-backed loan line that had previously expired. Under the terms of this amendment, we may elect to have individual minimum fundings of $100,000 up to an aggregate limit of $3.0 million through December 23, 2008. All borrowings will be secured by the underlying financed equipment.

As of December 31, 2007, we have an aggregate $1.2 million outstanding on this asset-backed loan line relating to two fundings with interest rates of 10.05% and 9.73% to be repaid in 36 monthly installments.

7. Commitments and Contingencies

Building Leases

We lease facilities in the United States, Germany, China, United Kingdom, India and Japan. In total, we lease space in six buildings under leases that expire at various dates through September 2015. Total rent expense under these leases was approximately $5.0 million, $5.0 million, and $4.3 million in 2007, 2006, and 2005, respectively.

In September 2005, we entered into an amendment to our lease for our corporate headquarters in San Diego. The lease amendment provides for the deferral of approximately $3.2 million of the monthly rent payments by reducing the monthly payments during the period commencing October 1, 2005 and ending September 30, 2007 and increasing the aggregate monthly payments by the deferred amount for the remaining term of the lease, from October 1, 2007 to September 30, 2012. The total obligation under the lease remains unchanged. Rent expense is calculated on a straight-line basis. In connection with the lease amendment, we issued our landlord a warrant to purchase 50,000 shares of our common stock with an exercise price of $2.64 per share. The warrants are exercisable and have a ten year term. The fair value of the warrants, calculated using the Black-Scholes model, was recorded as prepaid rent and is being amortized as rent expense over the remaining life of the lease.

The following is a schedule of future minimum lease payments at December 31, 2007:

Year Ending December 31,	Operating Leases
	(In thousands)
2008	6,392
2009	6,273
2010	5,970
2011	5,347
2012	5,166
Thereafter	12,190
	$41,338

The above operating leases expire at various dates through 2015. Certain leases contain extension, return, or renewal provisions for two years at existing lease rates and/or purchase options. Future operating lease commitments for leases have not been reduced by future minimum sublease rentals aggregating $1.0 million.

Capital Equipment Leases

During 2000, we entered into a master equipment lease agreement providing for borrowings up to $8.0 million. Under the agreement, the lessor purchased the equipment that we leased subject to quarterly payments for 14 quarters. During 2006, we paid the remaining balance owed under the lease agreement. No further amounts are available for borrowing under this agreement.

Letters of Credit

At December 31, 2007, we had outstanding stand-by letters of credit with financial institutions totaling $1.1 million related to our building and operating leases, which will remain in place until the expiration of the Newton, Massachusetts building lease agreement in December 2010.

Collaboration, Development, and Licensing Agreements

In October 2005, we acquired exclusive rights in certain countries, including the United States, United Kingdom and other countries in Europe and elsewhere, to non-invasive prenatal diagnostic intellectual property from Isis Innovation Ltd., the technology transfer company of the University of Oxford. The intellectual property covers non-invasive prenatal genetic diagnostic testing on fetal nucleic acids derived from plasma or serum on any platform including mass spectrometry and real time polymerase chain reaction amplification platforms. In October 2006 and November 2007 we entered into amendments to the agreement that expanded the licensed applications for the licensed intellectual property and the licensed territory. Under the terms of the agreement and its amendments, we have paid up-front fees totaling $0.8 million and are required to pay up to approximately $0.3 million in aggregate milestone payments upon the achievement of initial sales or tests performed of various products or the issuance of a patent, as well as royalties on product sales.

We have entered into various license agreements since 1996 allowing us to utilize certain patents rights. If these patents are used in connection with a commercial product sale, we will pay royalties based on a percentage of the related product revenues. During the years ended December 31, 2007, 2006, and 2005, the amount of

royalties incurred in connection primarily with product sales was $0.1 million, $0.1 million, and $0.2 million, respectively.

Litigation

In November 2001, we and certain of our current or former officers and directors were named as defendants in a class action shareholder complaint filed by Collegeware USA in the U.S. District Court for the Southern District of New York (now captioned In re Sequenom, Inc. IPO Securities Litigation) Case No. 01-CV-10831. Similar complaints were filed in the same District Court against hundreds of other public companies that conducted initial public offerings of their common stock in the late 1990s and 2000. In the complaint, the plaintiffs allege that our underwriters, certain of our officers and directors and we violated the federal securities laws because our registration statement and prospectus contained untrue statements of material fact or omitted material facts regarding the compensation to be received by and the stock allocation practices of the underwriters. The plaintiffs seek unspecified monetary damages and other relief. In October 2002, our officers and directors were dismissed without prejudice pursuant to a stipulated dismissal and tolling agreement with the plaintiffs. In February 2003, the District Court dismissed the claim against us brought under Section 10(b) of the Securities Exchange Act of 1934, without giving the plaintiffs leave to amend the complaint with respect to that claim. The District Court declined to dismiss the claim against us brought under Section 11 of the Securities Act of 1933.

In September 2003, pursuant to the authorization of a special litigation committee of our board of directors, we approved in principle a settlement offer by the plaintiffs. In September 2004, we entered into a settlement agreement with the plaintiffs. In February 2005, the District Court issued a decision certifying a class action for settlement purposes and granting preliminary approval of the settlement subject to modification of certain bar orders contemplated by the settlement. In August 2005, the District Court reaffirmed class certification and preliminary approval of the modified settlement. In February 2006, the District Court dismissed litigation filed against certain underwriters in connection with the claims to be assigned to the plaintiffs under the settlement. In April 2006, the District Court held a final fairness hearing to determine whether to grant final approval of the settlement. In December 2006, the U.S. Court of Appeals for the Second Circuit vacated the District Court's decision certifying as class actions the six lawsuits designated as "focus cases." Thereafter the District Court ordered a stay of all proceedings in all of the lawsuits pending the outcome of plaintiffs' petition to the Second Circuit for rehearing *en banc*. In April 2007, the Second Circuit denied plaintiffs' rehearing petition, but clarified that the plaintiffs may seek to certify a more limited class in the District Court. Accordingly, the settlement as originally negotiated was terminated pursuant to stipulation and will not receive final approval. Plaintiffs filed amended complaints in the six focus cases in August 2007. Sequenom is not one of the focus case issuers. In September 2007, Sequenom's named officers and directors again extended the tolling agreement with the plaintiffs. Also in September 2007, the plaintiffs moved to certify the classes alleged in the focus cases and to appoint class representatives and class counsel in those cases. The focus case issuers filed motions to dismiss the claims against them in November 2007 and an opposition to plaintiffs' motion for class certification in December 2007. Both motions are pending.

On August 3, 2007, we received a demand letter dated July 31, 2007, demanding on behalf of an alleged stockholder, Vanessa Simmonds, that our board of directors prosecute a claim against our IPO underwriters, in addition to certain unnamed officers, directors and principal stockholders as identified in our IPO prospectus, for violations of sections 16(a) and 16(b) of the Securities Exchange Act of 1934. The demand letter asserts purchases and sales of our common stock within periods of less than six months and failure to report such transactions, and seeks unspecified disgorgement of profits. We requested further information from Ms. Simmonds in order to evaluate the demand and although Ms. Simmonds provided a response, we still do not

have adequate information to evaluate the demand and there has been no further correspondence or communication with Ms. Simmonds.

We do not anticipate that the ultimate outcome of either of the events set forth above will have a material adverse impact on our financial position.

In addition, from time to time, we may be involved in litigation relating to claims arising out of our operations in the normal course of business.

8. Related Party Transactions

We had the following transactions with parties related to certain of our Board members:

- Boston University. Dr. Charles Cantor is our Chief Scientific Officer, a member of our Board and was previously the chair and professor of the department of biomedical engineering and biophysics, and Director of the Center for Advanced Biotechnology at Boston University. We have agreements with Boston University in which Dr. Cantor participates under which we paid $0.4 million, $0.4 million, and $0.3 million, and we recorded product revenue for MassARRAY hardware and consumables, totaling $0.1 million, $0.1 million, and $0.1 million, in the years ended December 31, 2007, 2006 and 2005, respectively.
- University of California, San Diego. Dr. Cantor is adjunct professor in the department of bioengineering at the University of California, San Diego, or UCSD. We recorded product revenue for MassARRAY hardware and consumables, totaling $2,000, $42,000 and $0.1 million in the years ended December 31, 2007, 2006 and 2005, respectively.

At December 31, 2007, we had the following receivable and payable balances with the above related parties (In thousands):

Related party	Receivables	Payables
Boston University	$ 27	$118
UCSD	—	—
Total	$ 27	$118

At December 31, 2006, we had the following receivable and payable balances with the above related parties (In thousands):

Related party	Receivables	Payables
Boston University	$22	$ 75
UCSD	4	—
Total	$26	$ 75

9. Stockholders' Equity

In June 2006, we closed a private placement financing that provided us with approximately $30.0 million of net proceeds from the sale of 19,999,998 shares of common stock and seven year warrants to purchase up to an additional 11,999,999 shares of common stock, subject to certain adjustment provisions. In conjunction with the

private placement financing and our annual meeting of stockholders, our stockholders approved amendments to our certificate of incorporation to effect a reverse stock split and increase the number of authorized shares of common stock to 185,000,000. On June 1, 2006, we completed a 1-for-3 reverse stock split of our common stock. Accordingly, all share, warrant, option and per share information for all periods presented has been restated to account for the effect of the reverse stock split.

On April 30, 2007, we closed a $20.0 million registered direct offering of our common stock to several new and existing investors. Under the terms of the transaction we issued and sold 6,666,666 shares at $3.00 per share, with aggregate net proceeds of approximately $18.3 million after deducting placement agents' fees and transaction expenses.

In October 2007, we closed a private placement of our common stock for approximately $30.5 million to certain investors. Under the terms of the transaction we issued and sold 3,383,335 shares at $9.00 per share, with anticipated aggregate net proceeds of approximately $28.1 million after deducting placement agents' fees and transaction expenses.

Stock Compensation Plans

On May 31, 2006, the stockholders approved our 2006 equity incentive plan, or 2006 plan, as the successor to our 1999 stock option plan, or 1999 plan. In connection with the adoption of the 2006 plan, we terminated the automatic annual increase feature under the 1999 plan and resolved to cease to grant additional stock awards under the 1999 plan following the effectiveness of the 2006 plan. The aggregate number of shares of common stock that may be issued under the 2006 plan is 6,986,036, plus the number of shares subject to any stock awards under the 1999 plan that terminate or are forfeited or repurchased and would otherwise have been returned to the share reserve under the 1999 plan.

Stock Options

The estimated fair value of each stock option award granted was determined on the date of grant using the Black-Scholes option valuation model with the following weighted-average assumptions for stock option grants during the years ended December 31, 2007, 2006 and 2005:

	2007	2006	2005
Risk free interest rates	4.51%	4.95%	4%
Volatility	82%	101%	93%
Dividend yield	0%	0%	0%
Expected option term (years)	6.4	6.7	6.0
Weighted average fair value of stock option grants to employees	$4.09	$1.65	$2.73

The risk-free interest rate assumption is based upon observed interest rates appropriate for the expected term of our employee stock options. The expected volatility is based on the historical volatility of our stock. We have not paid any dividends on common stock since our inception and do not anticipate paying dividends on common stock in the foreseeable future. The computation of the expected option term is based on a weighted-average calculation combining the average life of stock options that have already been exercised or cancelled with the estimated life of all unexercised stock options.

SFAS 123R requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Pre-vesting forfeitures were estimated to be 12.4% based on historical experience. In our pro forma information required under SFAS 123 for the periods prior to fiscal 2006, we accounted for forfeitures as they occurred. Our determination of fair value is affected by our stock price as well as a number of assumptions that require judgment.

A summary of the status of our stock option plans as of December 31, 2007 and of changes in stock options outstanding under the plans during the years ended December 31, 2007, 2006 and 2005 is as follows:

Outstanding	Shares Subject to Options	Weighted Average Exercise Price per Share	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Outstanding at December 31, 2004	1,711,697	$16.17		
Granted	542,334	3.21		
Canceled	(407,320)	11.07		
Exercised	(17,469)	0.90		
Outstanding at December 31, 2005	1,829,242	$13.21		
Granted	2,159,660	1.95		
Canceled	(689,685)	10.43		
Exercised	(13,434)	3.37		
Outstanding at December 31, 2006	3,285,783	$ 6.45		
Granted	2,232,976	5.38		
Canceled	(270,452)	5.20		
Exercised	(168,071)	2.98		
Outstanding at December 31, 2007	5,080,236	$ 6.16	8.2	$27,185,488
Options vested and exercisable at December 31, 2007	1,682,148	$10.33	6.9	$ 8,446,847

As of December 31, 2007, there was $7.5 million of unamortized compensation cost related to unvested stock option awards, which is expected to be recognized over a remaining weighted-average vesting period of 2.69 years. Cash received from stock option exercises for the years ended December 31, 2007 and 2006 was $446,000 and $45,000, respectively.

At December 31, 2007, 1,855,800 shares were available for future option grants.

Following, is a further breakdown of the options outstanding as of December 31, 2007:

Range of Exercise Prices	Options Outstanding	Weighted Average Remaining Life in Years	Weighted Average Exercise Price	Options Exercisable	Weighted Average Exercise Price of Options Exercisable
$1.50 – $1.83	400,892	8.46	$ 1.74	146,787	$ 1.75
$1.85 – $1.87	1,126,124	8.43	$ 1.87	460,313	$ 1.87
$1.89 – $3.30	782,181	7.84	$ 2.74	361,732	$ 2.93
$3.39 – $4.48	518,394	8.46	$ 4.20	76,861	$ 3.77
$4.49 – $4.70	517,937	9.2	$ 4.61	40,670	$ 4.60
$4.72 – $4.81	119,500	9.39	$ 4.79	802	$ 4.72
$4.93	697,669	9.28	$ 4.93	73,226	$ 4.93
$4.97 – $11.04	630,931	7.78	$ 8.42	235,288	$ 8.12
$11.07 – $84.93	213,234	3.49	$ 22.25	213,095	$ 22.25
$105.00	73,374	2.57	$105.00	73,374	$105.00
$1.50 – $105.00	5,080,236	8.19	$ 6.16	1,682,148	$ 10.33

Restricted Stock Awards and Deferred Compensation

On January 28, 2007, we granted restricted stock awards to certain executive officers and employees. At December 31, 2007, 57,126 shares with a weighted average grant date fair value of $4.60 per share remained outstanding and 7,247 shares were cancelled during 2007. The awards fully vest one year from the grant date.

On October 18, 2007, we granted 50,000 restricted stock units to an executive officer with a grant date fair value of $11.04. At December 31, 2007, all shares remain outstanding. These shares vest over 4 years, with 13/48th of the shares vesting 13 months after the grant date, then equal monthly installments thereafter.

Employee Stock Purchase Plan

In 1999, we adopted the 1999 Employee Stock Purchase Plan, or 1999 ESPP. As of December 31, 2007, we had reserved 792,790 shares of common stock for issuance under the 1999 ESPP. Beginning in 2001, the amount of authorized shares available under the 1999 ESPP automatically increases each January 1st by an amount equal to 1% of the outstanding common stock on the last trading day of the prior year, subject to an annual increase limitation of 166,666 shares. The 1999 ESPP will have a series of concurrent offering periods, each with a maximum duration of 24 months. Shares are purchased semi-annually at 85% of the lower of the beginning or end of the period price.

In October 2006 the Board of Directors approved a change to all offerings under the 1999 ESPP that commence on or after February 1, 2007. New offerings will be for a duration of six months and will consist of one purchase interval, but will not impose either an individual or all-participant limitation on the number of shares purchasable on a purchase date, although the 1999 ESPP limits stock purchases to $25,000 per individual per calendar year. Participants had the option of: continuing under the current plan offering period until its expiration, or, withdrawing from the current offering prior to its expiration and enrolling in the new offering commencing February 1, 2007. Those employees not electing to enroll in the new offering period will continue under the then current offering until the 24 month offering period expires. As of December 31, 2007, employees have contributed approximately $219,000 to the current offering period of the 1999 ESPP. We have recognized approximately $11,000 and $0 as share-based compensation expense related to the 1999 ESPP for the years ended December 31, 2007 and 2006, respectively.

Warrants

In connection with the acquisition of Axiom Biotechnologies in 2002, we assumed an outstanding warrant to purchase 7,333 Axiom ordinary shares at an exercise price of $10.50, which was adjusted to become a warrant to purchase 1,535 shares of our common stock at an exercise price of $50.19 per share. As of December 31, 2007, this warrant has not been exercised and expires in December 2011.

In connection with the Series C Preferred Stock issued in May 1997, we issued warrants to purchase an aggregate of 106,508 shares of our Series C Preferred Stock at an exercise price of $3.15 per share. These warrants became exercisable for 35,503 shares of our common stock at an exercise price of $9.45 per share upon our initial public offering. In May 2007, 11,694 of these remaining warrants expired unexercised.

In connection with an amendment to our lease for our corporate headquarters in San Diego, California in September 2005, we issued to the landlord a warrant to purchase 50,000 shares of our common stock with an exercise price of $2.64 per share. The warrant expires in October 2015. As of December 31, 2007, the warrant remains outstanding and exercisable.

In connection with the private placement financing completed in June 2006, we issued to the investors warrants to purchase an aggregate of 11,999,999 shares of our common stock at an exercise price of $2.10 per share. These warrants contain anti-dilution provisions that adjust the exercise price and number of shares subject to the warrants upon reorganization, mergers, stock splits and combinations, reclassifications of our common stock, stock dividends, or other issuances of our common stock at purchase prices less than the warrants' exercise price (other than certain exempt issuances, such as sales of common stock to our employees or conversions of convertible securities and options that were outstanding prior to the issuance of the warrants). These warrants expire in September 2013. During the year ended December 31, 2007, an investor had exercised warrants to purchase 698,500 shares of our common stock. As of December 31, 2007, 11,301,499 of these warrants remain outstanding and exercisable.

Additionally in connection with the June 2006 private placement financing, we issued to our placement agent a warrant to purchase 866,666 shares of our common stock at an exercise price of $2.52 per share. This warrant contains anti-dilution provisions that adjust the exercise price and number of shares subject to the warrants upon reorganization, mergers, stock splits and combinations, reclassifications of our common stock, or stock dividends, but not for other issuances of our common stock. This warrant expires in June 2011. During 2007 the placement agent transferred portions of the warrant to certain of its employees. As of December 31, 2007, the placement agent and its transferees had exercised warrants in both cash and cashless exercises to purchase 682,337 shares of our common stock. As of December 31, 2007, warrants to purchase an aggregate of 125,233 shares remained outstanding and exercisable.

10. Income Taxes

On July 13, 2006, the FASB issued Financial Interpretation ("FIN") No. 48, "Accounting for Uncertainty in Income Taxes—An Interpretation of FASB Statement No. 109" (FIN No. 48). FIN No. 48 clarifies the accounting for uncertainty in income taxes recognized in an entity's financial statements in accordance with SFAS No. 109, Accounting for Income Taxes, and prescribes a recognition threshold and measurement attributes for financial statement disclosure of tax positions taken or expected to be taken on a tax return. Under FIN No. 48, the impact of an uncertain income tax position on the income tax return must be recognized at the largest amount that is more-likely-than-not to be sustained upon audit by the relevant taxing authority. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. Additionally,

FIN No. 48 provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. FIN No. 48 is effective for fiscal years beginning after December 15, 2006.

The Company adopted the provisions of FIN No. 48 on January 1, 2007. There were no unrecognized tax benefits as of the date of adoption and there are no unrecognized tax benefits included in the balance sheet at December 31, 2007 or December 31, 2006 that would, if recognized, affect the effective tax rate.

The Company's practice is to recognize interest and/or penalties related to income tax matters in income tax expense. The Company had $0 accrued for interest and penalties on the Company's balance sheets at December 31, 2007 and 2006 and has recognized $0 in interest and/or penalties in the statement of operations for the year ended December 31, 2007.

The Company is subject to taxation in the U.S., foreign and various state jurisdictions. The Company's tax years for 1993 and forward are subject to examination by the Federal and California tax authorities due to the carryforward of unutilized net operating losses and research and development credits.

The Company has not completed a Section 382/383 analysis regarding the limitation of net operating loss and research and development credit carryforwards. Until this analysis has been completed, the Company has removed the deferred tax assets for net operating losses of $90.5 million and research and development credits of $15.5 million generated through 2007 from its deferred tax asset schedule and has recorded a corresponding decrease to its valuation allowance. When this analysis is finalized, the Company plans to update its unrecognized tax benefits under FIN No. 48. The Company expects this analysis to be completed within the next 12 months and, as a result, the Company will update its unrecognized tax benefits within 12 months of this reporting date. Due to the existence of the valuation allowance, future changes in the Company's unrecognized tax benefits will not impact the Company's effective tax rate.

The reconciliation of income tax computed at the Federal statutory tax rate to the benefit for income taxes is as follows:

	December 31,		
	2007	2006	2005
		(In thousands)	
Tax at statutory rate	$ (7,694)	$(6,370)	$(9,558)
State taxes, net of federal benefit	(1,263)	(1,010)	(1,516)
Change in valuation allowance	(108,313)	6,950	8,175
Credits and other	117,270	(192)	1,970
	$ —	$ (622)	$ (929)

The 2006 and 2005 income tax benefit of $0.6 million, and $0.9 million is comprised of foreign deferred taxes.

Deferred income taxes reflect the net effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of our deferred tax assets and liabilities are shown below. A full valuation allowance has been recorded, as realization of such assets is uncertain.

	December 31,	
	2007	2006
	(In thousands)	
Deferred tax assets:		
Net operating loss carryforwards	$ 3,759	$ 102,131
Research and development credits	—	12,513
Capitalized research expenses	13,120	10,785
Capital loss carryforward	—	1,003
Other, net	6,136	5,181
Total deferred tax assets	23,015	131,613
Deferred tax liabilities: Intangible assets	—	—
Valuation allowance	(23,015)	(131,613)
Net deferred tax assets (liabilities)	$ —	$ —

At December 31, 2007, we have federal and state tax net operating loss carryforwards of approximately $239.3 million and $119.3 million, respectively. The difference between the federal and state tax loss carryforwards is attributable to the capitalization of research and development expenses for state tax purposes and the limitation on the California loss carryforwards. The federal tax loss carryforwards will begin to expire in 2008, unless previously utilized. Approximately $6.3 million and $27.7 million of the federal and state tax loss carryforwards, respectively, expired in 2007 and the remaining state tax loss carry-forwards will continue to expire in 2008 unless previously utilized.

We incurred a federal and state capital loss on the disposal of two of our foreign subsidiaries in 2002 totaling $2.5 million. The capital loss carryforward expired in 2007.

We also have German net operating loss carryforwards of approximately $12.6 million, which may be carried forward indefinitely. We have discontinued operations in the United Kingdom (U.K.) and therefore, have removed our U.K. net operating loss carryforwards of $35.6 million from our deferred tax schedule.

We also have federal and state research and development tax credit carryforwards of approximately $10.3 million and $8.0 million, respectively. The federal research and development tax credit carryforwards will begin to expire in 2011 unless previously utilized.

11. Savings and Pension Plans

We have a 401(k) savings plan covering most United States employees. In the United Kingdom we make contributions to defined contribution pension plans. Under these plans, individual employees may make contributions to the plan, which can be matched by us in an amount determined by the Board of Directors or as determined by local statutes. We made no matching contributions in 2007 and 2006. We made matching contributions totaling approximately $0.2 million in 2005.

12. Geographic Information

We have wholly-owned subsidiaries located in Germany, the United Kingdom, India and Japan and have customer and vendor relationships worldwide. The following table presents information about us by geographic area. There were no material amounts of transfers between geographic areas. Included in the consolidated balance sheets and consolidated statements of operations are the following domestic and foreign components at December 31, 2007, 2006 and 2005:

	December 31,		
	2007	2006	2005
	(In thousands)		
Current assets:			
United States	$ 59,992	$ 29,953	$ 12,803
Europe	6,313	3,225	2,859
Asia	2,087	1,230	172
	$ 68,392	$ 34,408	$ 15,834
Property, equipment and leasehold improvements, net:			
United States	$ 5,559	$ 4,149	$ 5,079
Europe	276	374	534
Asia	124	5	8
	$ 5,959	$ 4,528	$ 5,621
Other assets:			
United States	$ 1,695	$ 945	$ 2,917
Europe	—	—	64
	$ 1,695	$ 945	$ 2,981
Total assets:			
United States	$ 67,245	$ 35,047	$ 20,799
Europe	6,590	3,599	3,457
Asia	2,211	1,235	180
	$ 76,046	$ 39,881	$ 24,436
Revenues:			
United States	$ 22,243	$ 15,947	$ 10,205
Europe	10,821	7,829	6,201
Asia	7,938	4,720	3,015
	$ 41,002	$ 28,496	$ 19,421
Net income (loss):			
United States	$(12,690)	$(13,035)	$(18,497)
Europe	(2,527)	661	(3,777)
Asia	(6,766)	(5,203)	(4,263)
	$(21,983)	$(17,577)	$(26,537)

13. Selected Quarterly Financial Data (unaudited)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total Year
	(In thousands, except share information)				
2007					
Net sales	$ 9,892	$10,153	$ 9,844	$11,113	$ 41,002
Gross profit	5,466	5,998	5,371	6,090	22,925
Net loss	(3,768)	(4,807)	(5,493)	(7,915)	(21,983)
Net loss per share, basic and fully diluted	$ (0.11)	$ (0.13)	$ (0.14)	$ (0.18)	$ (0.57)
Shares used in calculated per share amounts, historical, basic and fully diluted	33,447	38,008	40,262	43,618	38,865
2006					
Net sales	$ 6,911	$ 7,188	$ 6,510	$ 7,887	$ 28,496
Gross profit	4,191	4,160	3,578	4,680	16,609
Net loss	(3,720)	(3,885)	(4,641)	(5,332)	(17,577)
Net loss per share, basic and fully diluted	$ (0.27)	$ (0.21)	$ (0.14)	$ (0.16)	$ (0.71)
Shares used in calculated per share amounts, historical, basic and fully diluted	13,414	18,851	33,423	33,431	24,842

Schedule II—SEQUENOM, INC.

Valuation and Qualifying Accounts
($ in thousands)

Description	Balance at Beginning of Period	Charged to Costs and Expenses	Deductions	Balance at End of Period
Year ended December 31, 2007:				
Allowance for doubtful accounts	$ 117	$ 143	$ 74	$ 186
Reserve for obsolete or excess inventory	1,082	185	178[1]	1,089
Year ended December 31, 2006:				
Allowance for doubtful accounts	$ 25	$ 96	$ 4	$ 117
Reserve for obsolete or excess inventory	3,142	(696)	1,364[1]	1,082
Year ended December 31, 2005:				
Allowance for doubtful accounts	$ 96	$(144)	$ (73)[2]	$ 25
Reserve for obsolete or excess inventory	3,193	707	758[1]	3,142

(1) Write off of obsolete or excess inventory

(2) Includes $75,000 collection deducted in 2004

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SEQUENOM, INC.
3595 John Hopkins Court
San Diego, California 92121
(858) 202-9000

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD ON MAY 29, 2008

To the Stockholders of Sequenom, Inc.:

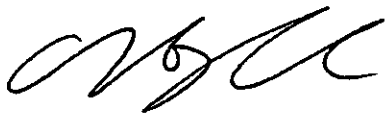
NOTICE IS HEREBY GIVEN that the Annual Meeting of Stockholders of Sequenom, Inc., a Delaware corporation (the "Company"), will be held on Thursday, May 29, 2008 at 9:00 a.m. local time at the corporate headquarters of the Company located at 3595 John Hopkins Court, San Diego, California 92121 for the following purposes:

1. to elect eight directors to hold office until the annual meeting of stockholders in 2009;
2. to approve an amendment to the Company's 2006 Equity Incentive Plan to increase the number of shares of the Company's common stock available for issuance under such plan by 1,500,000 shares;
3 to ratify our Audit Committee's selection of Ernst & Young LLP to be our independent registered public accounting firm for 2008; and
4. to conduct any other business properly brought before the meeting or any adjournment or postponement thereof.

These items of business are more fully described in the Proxy Statement accompanying this Notice of Annual Meeting.

The record date for the Annual Meeting is April 2, 2008. Only stockholders of record at the close of business on that date may vote at the meeting or any adjournment thereof.

BY ORDER OF THE BOARD OF DIRECTORS



Harry Stylli
President and Chief Executive Officer

San Diego, California

April 10, 2008

ALL STOCKHOLDERS ARE CORDIALLY INVITED TO ATTEND THE MEETING IN PERSON. WHETHER OR NOT YOU EXPECT TO ATTEND THE MEETING, PLEASE COMPLETE, DATE, SIGN AND RETURN THE ENCLOSED PROXY AS PROMPTLY AS POSSIBLE IN ORDER TO ENSURE YOUR REPRESENTATION AT THE MEETING. A RETURN ENVELOPE (WHICH IS POSTAGE PREPAID IF MAILED IN THE UNITED STATES) IS ENCLOSED FOR THAT PURPOSE. EVEN IF YOU HAVE GIVEN YOUR PROXY, YOU MAY STILL VOTE IN PERSON IF YOU ATTEND THE MEETING. PLEASE NOTE, HOWEVER, THAT IF YOUR SHARES ARE HELD OF RECORD BY A BROKER, BANK OR OTHER NOMINEE AND YOU WISH TO VOTE AT THE MEETING, YOU MUST OBTAIN FROM THE RECORD HOLDER A PROXY ISSUED IN YOUR NAME.

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SEQUENOM, INC.
3595 John Hopkins Court
San Diego, California 92121
(858) 202-9000

PROXY STATEMENT FOR ANNUAL MEETING OF STOCKHOLDERS May 29, 2008

QUESTIONS AND ANSWERS ABOUT THIS PROXY MATERIAL AND VOTING

Why am I receiving these materials?

We sent you this proxy statement and the enclosed proxy card because the Board of Directors of Sequenom, Inc. (sometimes referred to as the "Company" or "Sequenom") is soliciting your proxy to vote at our 2008 Annual Meeting of Stockholders. You are invited to attend the annual meeting to vote on the proposals described in this proxy statement. However, you do not need to attend the meeting to vote your shares. Instead, you may simply complete, sign and return the enclosed proxy card.

We intend to mail this proxy statement and accompanying proxy card on or about April 11, 2008 to all stockholders of record entitled to vote at the annual meeting.

What am I voting on?

There are three matters scheduled for a vote at the annual meeting:

- Election of eight directors;
- Approval of an amendment to the Company's 2006 Equity Incentive Plan to increase the number of shares of the Company's common stock available for issuance under such plan by 1,500,000 shares; and
- Ratification of the selection by the Audit Committee of our Board of Directors of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2008.

If any other matter is properly presented at the meeting or any adjournment or postponement thereof, your proxy (one of the individuals named on your proxy card) will vote your shares using his or her best judgment.

Who can vote at the annual meeting?

Only stockholders of record at the close of business on April 2, 2008 will be entitled to vote at the annual meeting. At the close of business on this record date, there were 45,406,215 shares of common stock outstanding and entitled to vote.

Stockholder of Record: Shares Registered in Your Name

If at the close of business on April 2, 2008 your shares were registered directly in your name with our transfer agent, American Stock Transfer & Trust Company, then you are a stockholder of record. As a stockholder of record, you may vote in person at the meeting or vote by proxy. Whether or not you plan to attend the meeting, we urge you to complete and return the enclosed proxy card to ensure your vote is counted.

Beneficial Owner: Shares Registered in the Name of a Broker or Bank

If at the close of business on April 2, 2008 your shares were held in an account at a brokerage firm, bank, dealer, or other similar organization, then you are the beneficial owner of shares held in street name, and these proxy materials are being forwarded to you by that organization. The organization holding your account is considered the stockholder of record for purposes of voting at the annual meeting. As a beneficial owner, you

have the right to direct your broker or other agent on how to vote the shares in your account. You are also invited to attend the annual meeting. However, since you are not the stockholder of record, you may not vote your shares in person at the meeting unless you request and obtain a valid proxy from your broker or other agent.

How do I vote?

You may either vote "For" all the nominees to the Board of Directors or you may abstain from voting for any nominee you specify. You cannot vote for a greater number of persons than the number of nominees to the Board of Directors named. For each of the other matters to be voted on, you may vote "For" or "Against" or abstain from voting. The procedures for voting are fairly simple:

Stockholder of Record: Shares Registered in Your Name

If you are a stockholder of record, you may vote in person at the annual meeting or vote by proxy using the enclosed proxy card. Whether or not you plan to attend the meeting, we urge you to vote by proxy to ensure your vote is counted. You may still attend the meeting and vote in person if you have already voted by proxy.

- To vote using the proxy card, simply complete, sign and date the enclosed proxy card and return it promptly in the envelope provided. If you return your signed proxy card to us before the annual meeting, we will vote your shares as you direct.
- To vote in person, come to the annual meeting, and we will give you a ballot when you arrive.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If you are a beneficial owner of shares registered in the name of your broker, bank or other agent, you should have received a proxy card and voting instructions with these proxy materials from that organization rather than from us. Simply complete and mail the proxy card to ensure that your vote is counted.

To vote in person at the annual meeting, you must obtain a valid proxy from your broker, bank or other agent. Follow the instructions from your broker or bank included with these proxy materials or contact your broker or bank to request a proxy form.

How many votes do I have?

On each matter to be voted upon, you have one vote for each share of common stock you own as of the close of business on April 2, 2008.

What if I return a proxy card but do not make specific choices?

If you return a signed and dated proxy card without marking any voting selections, your shares will be voted "For" the election of all nominees for director and "For" all other matters described in this proxy statement. If any other matter is properly presented at the meeting, your proxy will vote your shares using his or her best judgment.

What does it mean if I receive more than one proxy card?

If you receive more than one proxy card, your shares are registered in more than one name or are registered in different accounts. Please complete, sign and return **each** proxy card to ensure that all of your shares are voted.

Can I change my vote after submitting my proxy?

Yes. You can revoke your proxy at any time before the final vote at the meeting. You may revoke your proxy in any one of three ways:

- You may submit another properly completed proxy card with a later date.

- You may send a written notice that you are revoking your proxy to Sequenom's Secretary at 3595 John Hopkins Court, San Diego, California 92121.
- You may attend the annual meeting and vote in person. Simply attending the meeting will not, by itself, revoke your proxy.

How are votes counted?

Votes will be counted by the inspector of election appointed for the meeting, who will separately count "For" and "Withhold" and, with respect to proposals other than the election of directors, "Against" votes, abstentions and broker non-votes. Abstentions will be counted towards the vote total for each proposal, and will have the same effect as "Against" votes. Broker non-votes have no effect and will not be counted towards the vote total for any proposal. Please see the more detailed description of the effect of broker non-votes on specific proposals in the answer to "How many votes are needed to approve each proposal?" below.

If your shares are held by your broker as your nominee (that is, in street name), you will need to obtain a proxy card from the institution that holds your shares and follow the instructions included on that proxy card regarding how to instruct your broker to vote your shares. If you do not give instructions to your broker, your broker can vote your shares with respect to "discretionary" items but not with respect to "non-discretionary" items. Discretionary items are proposals considered routine under the rules of the New York Stock Exchange on which your broker may vote shares held in street name in the absence of your voting instructions. On non-discretionary items for which you do not give your broker instructions, the shares will be treated as broker non-votes.

How many votes are needed to approve each proposal?

- For the election of directors, the eight nominees receiving the most "For" votes from the shares present and entitled to vote at the annual meeting, either in person or by proxy, will be elected. Broker non-votes will have no effect.
- To be approved, Proposal 2 must receive "For" votes from a majority of the shares present and entitled to vote at the annual meeting, either in person or by proxy. If you select "Abstain" on your proxy card or you attend the meeting and abstain from voting, it will have the same effect as an "Against" vote. Broker non-votes will have no effect.
- To be approved, Proposal 3 must receive "For" votes from a majority of the shares present and entitled to vote at the annual meeting, either in person or by proxy. If you select "Abstain" on your proxy card or you attend the meeting and abstain from voting, it will have the same effect as an "Against" vote. Broker non-votes will have no effect.

What is the quorum requirement?

A quorum of stockholders is necessary to hold a valid meeting. A quorum will be present if at least a majority of the outstanding shares are represented by stockholders present at the meeting or by proxy. On April 2, 2008, the record date, there were 45,406,215 shares outstanding and entitled to vote. As a result 22,703,108 of these shares must be represented by stockholders present at the meeting or by proxy to have a quorum.

Your shares will be counted towards the quorum only if you submit a valid proxy vote or vote at the meeting. Abstentions and broker non-votes will be counted towards the quorum requirement. If there is no quorum, a majority of the votes present at the meeting may adjourn the meeting to another date.

How can I find out the results of the voting at the annual meeting?

Preliminary voting results will be announced at the annual meeting. Final voting results will be published in our quarterly report on Form 10-Q for the second quarter of 2008.

Who is paying for this proxy solicitation?

We will pay for the entire cost of soliciting proxies. In addition to these mailed proxy materials, our directors, officers and other employees may also solicit proxies in person, by telephone or by other means of communication. Directors, officers and other employees will not be paid any additional compensation for soliciting proxies. We may also reimburse brokerage firms, banks and other agents for the cost of forwarding proxy materials to beneficial owners.

When are stockholder proposals due for next year's annual meeting?

The deadline for submitting a stockholder proposal for inclusion in our proxy statement and form of proxy for the 2009 annual meeting of stockholders is December 12, 2008. Stockholders wishing to submit proposals or director nominations that are not to be included in such proxy statement and proxy must also do so by December 12, 2008. Stockholders are advised to review our Bylaws, which contain additional requirements with respect to advance notice of stockholder proposals and director nominations. Our current Bylaws are available at the SEC's website, *www.sec.gov*, or upon written request to Secretary, Sequenom, Inc., 3595 John Hopkins Court, San Diego, California 92121.

PROPOSAL 1

ELECTION OF DIRECTORS

Our Board of Directors is currently comprised of eight members and is nonclassified. Each Director serves for a one-year term. At the annual meeting, the term of office of all eight directors will expire.

The Nominating and Corporate Governance Committee of the Board of Directors has nominated Ernst-Gunter Afting, Ph.D., M.D., Charles R. Cantor, Ph.D., John A. Fazio, Harry F. Hixson, Jr., Ph.D., Richard A. Lerner, M.D., Ronald M. Lindsay, Ph.D., Harry Stylli, Ph.D., and Kathleen M. Wiltsey for re-election to the Board of Directors. If re-elected at the annual meeting, each nominee would serve until the 2009 annual meeting and his successor is elected and qualified.

Directors are elected by a plurality of the votes present in person or represented by proxy and entitled to vote at the annual meeting. Shares represented by executed proxies will be voted, if authority to do so is not withheld, for the election of Dr. Afting, Dr. Cantor, Mr. Fazio, Dr. Hixson, Dr. Lerner, Dr. Lindsay, Dr. Stylli, and Ms. Wiltsey. In the event that any nominee should be unavailable for election as a result of an unexpected occurrence, such shares will be voted for the election of such substitute nominee as the Nominating and Corporate Governance Committee may propose. Each of the nominees has agreed to serve if elected, and we have no reason to believe that any nominee will be unable to serve.

Set forth below is biographical information for each person nominated.

Nominees for Election for a One-year Term Expiring at the 2009 Annual Meeting

Ernst-Günter Afting, Ph.D., M.D.

Dr. Afting, 65, has served as a director since 1996. From 1995 until his retirement in 2006, Dr. Afting served as President and Chief Executive Officer of the National Research Center for Environment and Health, GSF-National Research Center for Environment and Health GmbH, in Munich, one of the biggest governmental research centers in Germany. From 1993 to 1995, he served as President and Chief Executive Officer of Roussel UCLAF, Paris. He was also a member of the board of the Pharmaceutical Division of Hoechst Group from 1984 to 1993 and was Chairman and Chief Executive Officer of the Divisional Pharmaceutical Board of Hoechst from 1992-1993. Dr. Afting was a member of the advisory committee on Science and Technology to German Chancellor Helmut Kohl from 1996 to 1997 and from 1996 to 2005 has been a member of the German National Advisory Committee on Health Research to the State Secretaries of Science, Technology and Health. Dr. Afting has been a member of the medical faculty at the University of Goettingen since 1985. Dr. Afting currently serves on the boards of Intercell AG, Vienna, Enanta Pharmaceuticals, Inc., and Olympus Europa GmbH, Hamburg. He received his Ph.D. in Chemistry and M.D. from the University of Freiburg/Breisgau, Germany.

Charles R. Cantor, Ph.D.

Dr. Cantor, 65, joined us as Chief Scientific Officer and Chairman of the Scientific Advisory Board in August 1998. Dr. Cantor is also Chief Executive Officer of DiThera, Inc., an early stage, privately-held biotechnology company that he founded in 2007. Since 1992 Dr. Cantor has served as a professor in the Department of Biomedical Engineering and Co-Director of the Center for Advanced Biotechnology at Boston University. Prior to that time, Dr. Cantor held positions at Columbia University and the University of California, Berkeley. He was also Director of the Human Genome Center of the Department of Energy at Lawrence Berkeley Laboratory. Dr. Cantor published the first textbook on genomics, *The Science and Technology of the Human Genome Project*, and remains active in the Human Genome Project through his membership in a number of the project's advisory committees and review boards. Dr. Cantor is a member of the National Academy of Sciences. He is also a scientific advisor to 12 biotech and life science companies and one venture capital firm. Dr. Cantor currently serves as a director of ExSAR, Inc., Human BioMolecular Research Institute, and Retrotrope, Inc. Dr. Cantor received his Ph.D. in Chemistry from the University of California, Berkeley.

John A. Fazio

Mr. Fazio, 64, has served as a director since 2007. Mr. Fazio is a former Senior General Practice Partner of PricewaterhouseCoopers. Mr. Fazio retired from PricewaterhouseCoopers in 2000 following 35 years of service to the global accounting and professional services company. A Certified Public Accountant and a Certified Management Accountant, Mr. Fazio held a variety of senior positions in accounting, auditing, consulting, and administration at PricewaterhouseCoopers. Currently, Mr. Fazio serves on the board of directors and chairs the audit committee of Heidrick and Struggles International, Inc. and has served in such capacities since 2003. Mr. Fazio is a former member of the boards of directors and chairman of the audit committees of ImClone Systems, Inc. and Dendrite International, Inc. He is also a former Chairman of the Accounting and Auditing Standards Committee of New Jersey Society of Certified Public Accountants, the State Society's senior technical committee. Mr. Fazio is a member of the American Institute of Certified Public Accountants and the Institute of Management Accountants and holds a B.S. from Pennsylvania State University and an M.S. from Ohio State University.

Harry F. Hixson, Jr., Ph.D.

Dr. Hixson, 69, has served as Chairman of our Board of Directors since January 2003. Dr. Hixson currently serves as a member of the Board of Directors of Infinity Pharmaceuticals, Inc., a cancer drug discovery and development company. Dr. Hixson previously served as the Chairman of the Board of Directors of Discovery Partners International, Inc. prior to its merger with Infinity Pharmaceuticals. Dr. Hixson has also served as a director of Arena Pharmaceuticals, Inc. since 2004, and currently serves as the Chairman of the Board of BrainCells, Inc., a privately held biopharmaceutical company focused on central nervous system drug development. He has served as Chairman of BrainCells since December 2003 and served as its Chief Executive Officer from July 2004 until September 2005. Dr. Hixson served as Chief Executive Officer of Elitra Pharmaceuticals, Inc., a privately held biopharmaceutical company focused on anti-infective drug development, from February 1998 until May 2003. He served as Amgen's President and Chief Operating Officer and as a member of its Board of Directors from 1988 to 1991. Prior to Amgen, Dr. Hixson held various management positions with Abbott Laboratories, including Vice President, Diagnostic Products Business Group, and Vice President, Research and Development, in the Diagnostics Division. He has been involved with the start-up of several biopharmaceutical companies, including Neurocrine Biosciences and Signal Pharmaceuticals, now part of Celgene. Dr. Hixson received his Ph.D. in Physical Biochemistry from Purdue University and an M.B.A. from the University of Chicago. He also received an Honorary Doctor of Science degree from Purdue University.

Richard A. Lerner, M.D.

Dr. Lerner, 69, has served as a director since 2007. Dr. Lerner has been President of The Scripps Research Institute, a private, non-profit biomedical research organization, since 1986. Dr. Lerner has received numerous prizes and awards, including the Wolf Prize in Chemistry in 1994, the California Scientist of the Year Award in 1996, and the Paul Ehrlich and Ludwig Darmstaedter Prize in 2003 for his achievements in connection with the development of catalytic antibodies and combinatorial antibody libraries. He is on the editorial boards of several research journals and has been elected to many prestigious scientific societies, boards, and academies, including the Royal Swedish Academy of Sciences and the National Academy of Sciences. Dr. Lerner currently serves on the board of directors and is a member of the nominating and corporate governance committees of Kraft Foods, Inc. He has been a director at Kraft since 2005. Dr. Lerner also serves as a member of the board of directors of Opko Health, Inc., formerly eXegenics, Inc., and as a member of the boards of directors of Xencor and Intra-Cellular Therapies, two privately held biotechnology companies. Dr. Lerner also serves on the Scientific Advisory Board of Dyadic, a biotechnology company. Dr. Lerner attended Northwestern University and received his B.S. and M.D. degrees from Stanford Medical School.

Ronald M. Lindsay, Ph.D.

Dr. Lindsay, 60, has been a director since May 2003. He currently operates Milestone Consulting, a biopharmaceutical consulting enterprise. He served as Vice President, Research and Development, and Chief Science Officer of diaDexus Inc., a privately held biotechnology company, from 2000 to January 2004. From 1997 through 2000, Dr. Lindsay served in various roles with Millennium Pharmaceuticals, Inc., a publicly traded biopharmaceutical company, including Senior Vice President, Biotherapeutics and Vice President, Preclinical Research and Development, of its subsidiary Millennium Biotherapeutics Inc. From 1989 to 1997, Dr. Lindsay served in various roles with Regeneron Pharmaceuticals Inc., of which he was a founding scientist, holding the position of Vice President, Neurobiology. He is a director of Arqule Inc., HistoRx Inc., and a Senior Advisor to TVM Capital, Munich. Dr. Lindsay is the author of more than 150 scientific publications and holder of multiple patents. Dr. Lindsay received his Ph.D. in Biochemistry from the University of Calgary.

Harry Stylli, Ph.D.

Dr. Stylli, 46, joined us in June 2005 as President and Chief Executive Officer and a director. From November 2004 to February 2005, Dr. Stylli served as President and Chief Executive Officer of Xencor, Inc., a privately held, next-generation antibody platform company. From May 2002 to July 2003, Dr. Stylli served as President and Chief Executive Officer for CovX Pharmaceuticals, a biopharmaceutical company that he co-founded and which was acquired by Pfizer. From 1995 to 2001, Dr. Stylli served in various capacities, including President for Aurora Biosciences Corporation, a drug discovery systems company of which Dr. Stylli was a co-founder. Dr. Stylli currently serves as a director of Molecular Insight Pharmaceuticals, Inc., a publicly held biotechnology company, as a director of privately-held Micropharma Ltd., a Canadian neutraceuticals company, and is an advisor to Nanosyn, a privately held medicinal chemistry company. Dr. Stylli received his Ph.D. from London University's Faculty of Medicine and an M.B.A. from the United Kingdom's Open University.

Kathleen M. Wiltsey

Ms. Wiltsey, 52, has served as a director since 2007. From 1984 through 1998, Ms. Wiltsey served in a series of senior marketing and business development positions at Amgen Inc., including as co-product development team leader and marketing director for EPOGEN® and as vice president with responsibility for Amgen's product licensing function. From May to October 2006, Ms. Wiltsey served the X Prize Foundation as executive director for the development and launch of the Archon X PRIZE for Genomics, a global technology competition to dramatically reduce the cost of sequencing human genomes and accelerate personalized medicine. Ms. Wiltsey has served as a member of the board of directors of Lexicon Pharmaceuticals, Inc. since 2007, and is currently president of the board of The Associates of the California Institute of Technology. She holds a B.S. from the Colorado School of Mines and an M.B.A. from Harvard University.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE IN FAVOR OF EACH NAMED NOMINEE.

Vacancies on the Board of Directors

Currently, vacancies on the Board of Directors may be filled only by at least a two-thirds majority of the directors then in office. A director elected by the Board of Directors to fill a vacancy, including a vacancy created by an increase in the number of directors, shall serve until the next annual meeting of stockholders and the director's successor is elected and qualified.

Independence of the Board of Directors

As required under applicable Nasdaq Marketplace Rules, a majority of the members of a listed company's board of directors must qualify as "independent," as affirmatively determined by the board of directors. Our

Board of Directors consults with our counsel to ensure that the Board of Directors' determinations are consistent with all relevant securities and other laws and regulations regarding the definition of "independent," including those set forth in pertinent Nasdaq Marketplace Rules, as in effect time to time.

Consistent with these considerations, after review of all relevant transactions and relationships between each director or any of his family members, and our senior management, our independent registered public accounting firm and us, the Board of Directors affirmatively has determined that all of the directors who served in 2007 were independent directors within the meaning of the applicable Nasdaq Marketplace Rules, except for Dr. Stylli, our Chief Executive Officer, and Dr. Cantor, our Chief Scientific Officer.

As required under applicable Nasdaq Marketplace Rules, in 2007 our independent directors met in regularly scheduled executive sessions at which only independent directors were present.

Meetings of the Board of Directors

The Board of Directors met six times during 2007. Each director attended 75% or more of the aggregate of the meetings of the Board of Directors and of the committees on which he served, held during the period for which he was a director or committee member, respectively.

Attendance at Annual Meetings

We have adopted a policy encouraging our directors and nominees for directors to attend our annual meetings of stockholders. The following directors attended our annual meeting in 2007: Dr. Cantor, Dr. Hixson, and Dr. Stylli.

Code of Business Conduct and Ethics

We have adopted a Code of Business Conduct and Ethics that applies to all of our officers, directors and employees. The Code of Business Conduct and Ethics is available in the Corporate Governance section under "Corporate" on our website at www.sequenom.com. If we make any substantive amendments to the Code of Business Conduct and Ethics or grant any waiver from a provision of the Code to the principal executive, financial or accounting officers, we will promptly disclose the nature of the amendment or waiver on our website.

Communication with the Board of Directors

Persons interested in communicating with our Board of Directors regarding their concerns or issues may send written correspondence to the Board of Directors in care of the Secretary at Sequenom, Inc., 3595 John Hopkins Court, San Diego, California 92121 or by email to "board@sequenom.com". The Secretary will screen communications for spam, junk mail, mass mailings, product complaints, product inquiries, new product suggestions, resumes, job inquiries, surveys, business solicitations and advertisements, as well as unduly hostile, threatening, illegal, unsuitable, frivolous, patently offensive or otherwise inappropriate material before forwarding to the Board of Directors. The process regarding security holder communications with the Board of Directors may be found in the Investor Relations section under "Corporate" on our website at *www.sequenom.com.*

Board Committees

The Board of Directors has three standing committees: an Audit Committee, a Compensation Committee and a Nominating and Corporate Governance Committee. The following table provides current membership and meeting information for 2007 for each of the committees:

Name	Audit	Compensation	Nominating and Corporate Governance
Ernst-Gunter Afting, Ph.D., M.D.	X		X*
Charles R. Cantor, Ph.D.			
John A. Fazio(1)	X*		
Harry F. Hixson, Jr., Ph.D.(2)		X	X
Richard A. Lerner, M.D.(3)		X	X
Ronald M. Lindsay, Ph.D.		X*	
Harry Stylli, Ph.D.			
Kathleen M. Wiltsey(4)	X		
Total meetings in 2007	5	9	4

* Current Committee Chair

(1) Mr. Fazio was elected to the Board of Directors and appointed chairman of the Audit Committee in October 2007.

(2) Dr. Hixson was a member of and served as chairman of the Audit Committee from February 2007 to October 2007.

(3) Dr. Lerner was elected to the Board of Directors and appointed to the Nominating and Corporate Governance Committee in July 2007 and the Compensation Committee in February 2008.

(4) Ms. Wiltsey was elected to the Board of Directors in June 2007. She served on the Compensation Committee from June 2007 until February 2008 and was appointed to the Audit Committee in February 2008.

Below is a description of each committee of the Board of Directors. Each of the committees has authority to engage legal counsel or other experts or consultants, as it deems appropriate to carry out its responsibilities. The Board of Directors has determined that each current member of each committee meets the applicable rules and regulations regarding independence and that each member is free of any relationship that would interfere with his or her individual exercise of independent judgment.

Nominating and Corporate Governance Committee

Three directors comprise the Nominating and Corporate Governance Committee: Dr. Afting (chair), Dr. Hixson and Dr. Lerner. The Nominating and Corporate Governance Committee is responsible for identifying, reviewing and evaluating candidates to serve as directors consistent with criteria approved by the Board of Directors, reviewing and evaluating incumbent directors; selecting candidates for election to the board of directors; making recommendations to the Board of Directors regarding the membership of the committees of the Board of Directors; assessing the performance of management and the Board of Directors, and overseeing corporate governance matters. Our Nominating and Corporate Governance Committee charter may be found in the Corporate Governance section under "Corporate" on our website at *www.sequenom.com*. All members of the Nominating and Corporate Governance Committee are independent (as currently defined in Nasdaq Marketplace Rule 4200(a)(15)).

The Nominating and Corporate Governance Committee believes that candidates for director should have certain minimum qualifications, including being able to read and understand basic financial statements, being over 21 years of age and having the highest personal integrity and ethics. The Committee also considers such factors as possessing relevant expertise upon which to be able to offer advice and guidance to management,

having sufficient time to devote to our affairs, demonstrated excellence in his or her field, having the ability to exercise sound business judgment and having the commitment to rigorously represent the long-term interests of our stockholders. The Committee retains the right to modify these qualifications from time to time. Candidates for director nominees are reviewed in the context of the current composition of the Board of Directors, our operating requirements and the long-term interests of stockholders. In conducting this assessment, the Committee considers diversity, age, skills, and such other factors as it deems appropriate given the current needs of the Board of Directors to maintain a balance of knowledge, experience and capability. In the case of incumbent directors, the Nominating and Corporate Governance Committee reviews such directors' overall service during their term, including the number of meetings attended, level of participation, quality of performance, and any other relationships and transactions that might impair such directors' independence. In the case of new director candidates, the Committee also determines whether the nominee must be independent under applicable Nasdaq and SEC rules. The Committee uses its network of contacts to compile a list of potential candidates, but may also engage, if it deems appropriate, a professional search firm. The Committee conducts any appropriate and necessary inquiries into the backgrounds and qualifications of possible candidates after considering the function and needs of the Board of Directors. The Committee meets to discuss and consider such candidates' qualifications and then selects a nominee by majority vote. During 2007, the Nominating and Corporate Governance Committee utilized and paid a fee to a third party to assist in the process of identifying and recruiting director candidates. The Committee may engage a third party for assistance in the future. To date, the Nominating and Corporate Governance Committee has not received any director nominee from a stockholder or stockholders other than the individuals designated by certain purchasers in connection with the closing of our private placement in June 2006. Pursuant to the purchase agreement for our 2006 private placement, each purchaser that holds at least 10% of outstanding shares of common stock have the right to nominate one individual for election to the Board of Directors provided such nominee has been approved by the Nominating and Corporate Governance Committee and complies with any relevant Nasdaq rule. Currently, only one purchaser, LBI Group Inc., holds a sufficient number of shares to exercise such right. To date, LBI Group has declined to exercise such right.

The Nominating and Corporate Governance Committee will consider director candidates recommended by stockholders. The Committee does not intend to alter the manner in which it evaluates candidates, including the minimum criteria set forth above, based on whether the candidate was recommended by a stockholder. Stockholders who wish to recommend individuals for consideration by the Nominating and Corporate Governance Committee to become nominees for election to the Board of Directors may do so by delivering a written recommendation to the Nominating and Corporate Governance Committee at the following address: Sequenom, Inc., 3595 John Hopkins Court, San Diego, California 92121. Such recommendations must be received by the Nominating and Corporate Governance Committee at least 120 days prior to the anniversary date of the mailing of our proxy statement for the last annual meeting of stockholders. Submissions must include the full name of the proposed nominee, a description of the proposed nominee's business experience for at least the previous five years, complete biographical information, a description of the proposed nominee's qualifications as a director and a representation that the nominating stockholder is a beneficial or record owner of our stock. Any such submission must be accompanied by the written consent of the proposed nominee to be named as a nominee and to serve as a director if elected.

Audit Committee

Three directors comprise the Audit Committee: Mr. Fazio (chair), Dr. Afting and as of February 2008, Ms. Wiltsey. The Audit Committee oversees our corporate accounting and financial reporting process. The Audit Committee evaluates the performance and assesses the qualifications of the independent registered public accounting firm that audits our financial statements; determines and approves the engagement of the independent registered public accounting firm; determines whether to retain or terminate the existing independent registered public accounting firm or to appoint and engage a new independent registered public accounting firm; reviews and approves the retention of the independent registered public accounting firm to perform any proposed permissible non-audit services; monitors the rotation of partners of the independent registered public accounting

firm on our audit engagement team as required by law; confers with management and the independent registered public accounting firm regarding the effectiveness of internal controls over financial reporting; establishes procedures, as required under applicable law, for the receipt, retention and treatment of complaints regarding accounting, internal accounting controls or auditing matters and the confidential and anonymous submission by employees of concerns regarding questionable accounting or auditing matters; reviews and approves or rejects related-person transactions; reviews the financial statements to be included in our Annual Report on Form 10-K; and discusses with management and the independent registered public accounting firm the results of the annual audit and our quarterly financial statements. The Audit Committee has adopted a written charter that may be found in the Corporate Governance section under "Corporate" on our website at *www.sequenom.com.*

All communications directed to the Audit Committee in accordance with the Open Door Policy for Reporting Complaints that relate to questionable accounting or auditing matters involving the Company will be promptly and directly forwarded to the Audit Committee. The Open Door Policy for Reporting Complaints is available in the Corporate Governance section under "Corporate" on our website at *www.sequenom.com.*

The Board of Directors annually reviews the Nasdaq listing standards definition of independence for Audit Committee members and has determined that all members who served on the Audit Committee in 2007 were independent (as independence is currently defined in Nasdaq Marketplace Rule 4200(a)(15) and SEC Rule 10A-3). The Board of Directors has determined that Mr. Fazio qualifies as an "audit committee financial expert," as defined in applicable SEC rules. The Board of Directors made a qualitative assessment of Mr. Fazio's level of knowledge and experience based on a number of factors, including his formal education and experience.

REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS*

The Audit Committee of the Board of Directors is currently comprised of Mr. Fazio (chair), Dr. Afting and Ms. Wiltsey. Each member of the Audit Committee is an independent director as determined by the Board of Directors based on applicable NASDAQ rules. Each member of the Audit Committee also satisfies the Securities and Exchange Commission additional independence requirements for members of audit committees. The Board of Directors has determined that Mr. Fazio meets the definition of an audit committee financial expert, as set forth in Item 407(d)(5)(ii) of SEC Regulation S-K. The Audit Committee selects the Company's independent registered public accounting firm and submits the selection to the stockholders for ratification. The Audit Committee oversees the Company's financial reporting process on behalf of the Board of Directors and operates under a written charter approved by the Board of Directors. The Committee's function is more fully described in its charter, which may be found in the Corporate Governance section under "Corporate" on the Company's website at *www.sequenom.com.*

Management is responsible for the preparation, presentation and integrity of the Company's consolidated financial statements, accounting and reporting principles, and the financial reporting process and procedures designed to ensure compliance with accounting standards, applicable laws and regulations, including establishing, maintaining, and evaluating the effectiveness of disclosure controls and procedures, establishing, maintaining, and evaluating the effectiveness of internal control over financial reporting, and evaluating any change in internal control over financial reporting.

The Company's independent registered public accounting firm is responsible for performing an independent audit of the Company's consolidated financial statements in accordance with generally accepted auditing standards and issuing a report thereon. The Company's independent registered public accounting firm is also responsible for performing an independent audit of the effectiveness of the Company's internal controls over financial reporting and issuing a report thereon. The Company's independent registered public accounting firm understands that they are accountable to the Audit Committee of the Board of Directors.

In this context, the Audit Committee has met and held discussions with management and Ernst & Young LLP, the Company's independent registered public accounting firm, including a discussion of the quality, not just the acceptability, of the accounting principles, the reasonableness of significant judgments, the clarity of disclosures in the consolidated financial statements, and a review of the effectiveness of the Company's internal control over financial reporting. Management represented to the Audit Committee that the Company's consolidated financial statements were prepared in accordance with generally accepted accounting principles, and the Audit Committee has reviewed and discussed the consolidated financial statements, including the audited consolidated financial statements, with management and the Company's independent registered public accounting firm. The Audit Committee discussed with Ernst & Young LLP matters required to be discussed by the Statement on Auditing Standards No. 61, as amended "Communication with Audit Committees" (AICPA, *Professional Standards* Vol. 1. AU Section 380), as adopted by the Public Company Accounting Oversight Board ("PCAOB") in Rule 3200T and PCAOB Auditing Standard No. 5, "An Audit of Internal Control Over Financial Reporting That Is Integrated with an Audit of Financial Statements."

The Audit Committee met on 5 occasions in 2007, and it also routinely meets separately in private sessions with Ernst & Young LLP and with the Company's Chief Financial Officer throughout the year.

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* The material in this report is not "soliciting material," is not deemed "filed" with the SEC and is not to be incorporated by reference in any filing of the Company under the Securities Act of 1933, as amended (the "1933 Act"), or the Securities Exchange Act of 1934, as amended (the "1934 Act"), whether made before or after the date of this proxy statement and without regard to any general incorporation language therein.

The Audit Committee has received from the Company's independent registered public accounting firm the written disclosures and the letter required by Independence Standards Board Standard No. 1 (*Independence Discussions with Audit Committees*). In addition, the Audit Committee discussed with the Company's independent registered public accounting firm that firm's independence from the Company and its management, and the results of their examinations. The Audit Committee has also concluded that Ernst & Young LLP's provision of audit and non-audit services to the Company and its affiliates is compatible with Ernst & Young LLP's independence.

Based on the Audit Committee's discussion with management and the Company's independent registered public accounting firm and the Audit Committee's review of the representation of management and the report of the Company's independent registered public accounting firm to the Audit Committee, the Audit Committee recommended that the Board of Directors include the audited consolidated financial statements in the Company's Annual Report on Form 10-K for the year ended December 31, 2007 filed with the Securities and Exchange Commission. The Committee has selected Ernst & Young LLP as the Company's independent registered public accounting firm and recommended that its selection be submitted to the stockholders for ratification.

Audit Committee

John A. Fazio
Ernst-Günter Afting, Ph.D., M.D.
Kathleen M. Wiltsey

Compensation Committee

Three directors comprise the Compensation Committee: Dr. Lindsay (chair), Dr. Hixson and as of February 2008, Dr. Lerner. The Compensation Committee establishes our executive compensation philosophy and reviews and approves our overall compensation strategy and policies. All members who served on the Compensation Committee in 2007 were independent (as currently defined in Nasdaq Marketplace Rule 4200(a)(15)). The Compensation Committee's charter may be found in the Corporate Governance section under "Corporate" on our website at *www.sequenom.com*. The functions of the Compensation Committee include, among other things:

- reviewing and approving the compensation and other terms of employment of our Chief Executive Officer;
- reviewing and approving the compensation and other terms of employment of the other executive officers;
- reviewing and approving corporate performance goals and objectives relevant to the compensation of our executive officers and other senior management; and
- administration of our equity incentive and stock purchase plans and other benefit plans and programs.

The Compensation Committee also reviews with management the Company's Compensation Discussion and Analysis and considers whether to recommend that it be included in the proxy statement and other filings.

Compensation Committee Processes and Procedures

Typically, the Compensation Committee meets in person in connection with regularly scheduled meetings of the Board of Directors at least five times annually and holds telephonic meetings with greater frequency if necessary. The Compensation Committee met nine times during 2007. The agenda for each meeting is usually developed by the Chair of the Compensation Committee, in consultation with our Chief Executive Officer and Vice President of Human Resources. The Compensation Committee meets regularly in executive session. However, from time to time, various members of management and other employees as well as outside advisors or

consultants may be invited by the Compensation Committee to make presentations, provide financial or other background information or advice or otherwise participate in Compensation Committee meetings. The Chief Executive Officer may not participate in or be present during any deliberations or determinations of the Compensation Committee regarding his compensation or individual performance objectives. The charter of the Compensation Committee grants the Compensation Committee full access to all books, records, facilities and personnel of the Company, as well as authority to obtain, at the expense of the Company, advice and assistance from internal and external legal, accounting or other advisors and consultants and other external resources that the Compensation Committee considers necessary or appropriate in the performance of its duties. In particular, the Compensation Committee has the sole authority to retain compensation consultants to assist in its evaluation of chief executive officer and other senior executive compensation, including the authority to approve the consultant's reasonable fees and other retention terms.

Under its charter, each member of the Compensation Committee must be a "non-employee director" within the meaning of Rule 16b-3 under the 1934 Act and an "outside director" within the meaning of Section 162(m) of the Internal Revenue Code (the "Code"), and each of Dr. Lindsay, Dr. Hixson and Dr. Lerner meets these requirements. Under its charter, the Committee is responsible for establishing the Company's compensation policies, plans and programs for all executive officers, for overseeing the overall compensation strategy for the Company and for administering the Company's benefit plans. The Committee provides guidance with respect to the purpose and principles behind the company's compensation decisions and overall compensation philosophy and objectives, oversees our compensation policies, plans and programs, and reviews and determines executive officer compensation. The Committee annually evaluates the performance and determines the compensation of the Chief Executive Officer and the other executive officers of the Company based upon a mix of factors including the achievement of corporate goals, achievement of individual goals, overall individual performance, and comparisons with other biotechnology companies selected based on size and competition for talent. The Chief Executive Officer was not present during the voting or deliberations by the Committee on his compensation.

Historically, the Compensation Committee has typically made adjustments to annual compensation, determined bonus and equity awards and set new performance objectives consistent with the performance goals established by the Board of Directors at one or more meetings held during the first quarter of the year. However, the Compensation Committee also considers matters related to individual compensation, such as compensation for new executive hires, as well as high-level strategic issues, such as the efficacy of the Company's compensation strategy, potential modifications to that strategy and new trends, plans or approaches to compensation, at various meetings throughout the year. Generally, each year our Board of Directors with input from our executive officers, defines measurable performance goals for the Company. Based upon these performance goals, our Compensation Committee, with input from our Board of Directors, weights each goal in view of each goal's overall importance to the Company and establishes incentive compensation parameters that reward achievement of those goals. The Compensation Committee's process comprises two related elements: the determination of specific individual compensation levels and the establishment of performance objectives for the Company and the executives for the current year. For executives other than the Chief Executive Officer, the Compensation Committee solicits and considers evaluations and recommendations submitted to the Committee by the Chief Executive Officer. In the case of the Chief Executive Officer, the evaluation of his performance is conducted by the Compensation Committee, which determines any adjustments to his compensation as well as awards to be granted. For all executives, as part of its deliberations, the Compensation Committee may review and consider, as appropriate, materials such as financial reports and projections, operational data, tax and accounting information, tally sheets that set forth the total compensation that may become payable to executives in various hypothetical scenarios, executive stock ownership information, company stock performance data, analyses of current Company-wide compensation levels, and opinions, recommendations, and/or data from any compensation consultant that the Compensation Committee may have retained, including analyses of executive compensation paid at other companies identified by the consultant.

The specific determinations of the Compensation Committee with respect to executive compensation for fiscal year 2007 as well as additional information regarding the role of the Compensation Committee and its processes and procedures are described in greater detail in the Compensation Discussion and Analysis section of this proxy statement.

Compensation Committee Interlocks And Insider Participation

During 2007, the following directors served as members of the Compensation Committee: Dr. Lindsay, Dr. Hixson, Ms. Wiltsey, and prior to his resignation as a director in July 2007, Patrick G. Enright. No member of the Compensation Committee has ever been our officer or employee nor has anyone who was a member in 2007 had a relationship with us requiring disclosure as a transaction with a related person. None of our executive officers currently serves, or has served during the last completed fiscal year, on the compensation committee or board of directors of any other entity that has one or more executive officers serving as a member of our Board of Directors or Compensation Committee.

REPORT OF THE COMPENSATION COMMITTEE OF THE BOARD OF DIRECTORS*

The Compensation Committee has reviewed and discussed with management the Compensation Discussion and Analysis contained in this proxy statement. Based on the review and discussion, the Compensation Committee has recommended to our Board of Directors that the Compensation Discussion and Analysis be included in this proxy statement and incorporated into our Annual Report on Form 10-K for the fiscal year ended December 31, 2007.

Compensation Committee

Ronald M. Lindsay, Ph.D.
Harry F. Hixson, Jr., Ph.D.
Richard A. Lerner, M.D.

* The material in this report is not "soliciting material," is not deemed "filed" with the SEC and is not to be incorporated by reference in any filing of the Company under the 1933 Act or the 1934 Act, whether made before or after the date of this proxy statement and without regard to any general incorporation language therein.

PROPOSAL 2

APPROVAL OF THE AMENDMENT TO THE 2006 EQUITY INCENTIVE PLAN

In April 2006, the Board adopted, and our stockholders subsequently approved, our 2006 Equity Incentive Plan (the "2006 Plan"), which initially included a reserve of (i) 3,500,000 shares, plus (ii) the number of shares that remained available for issuance under our 1999 Stock Incentive Plan (the "1999 Plan"), plus (iii) the number of shares subject to any stock awards under the 1999 Plan that terminated or were forfeited or repurchased and would otherwise have been returned to the share reserve under the 1999 Plan. As of March 17, 2008 (excluding the Additional Pool, as defined below) we have 882,669 shares (plus any shares that might in the future be returned to the 2006 Plan as a result of cancellation, expiration, or forfeit of outstanding stock awards) available for future grant under the 2006 Plan. There were 5,696,584 shares of our common stock reserved for issuance under the 2006 Plan as of March 17, 2008 (excluding the Additional Pool, as defined below) and up to an additional 1,091,129 shares subject to outstanding stock awards under the 1999 Plan that may return to the 2006 Plan share reserve in the future. As of March 17, 2008, 146,728 shares of restricted stock and restricted stock units and options to purchase 4,667,187 shares had been granted and were outstanding under the 2006 Plan.

In March 2008, the Board approved a 1,500,000 share increase in the number of shares of common stock available for issuance under the 2006 Plan. The increase is referred to as the "Additional Pool." The amendment adding the Additional Pool is referred to as the "Amendment." The Board believes the Amendment is necessary to ensure that the number of shares remaining available for issuance under the 2006 Plan is sufficient, in light of our current capitalization, to allow us to continue to attract and retain the services of key individuals essential to our long-term growth and financial success. We rely significantly on equity incentives in the form of stock awards to attract and retain key employees, and we believe that such equity incentives are necessary for us to remain competitive in the marketplace for executive talent and other key employees. We grant options or other stock awards to newly hired or continuing employees based on both competitive market conditions and individual performance.

Stockholders are requested in this Proposal 2 to approve the Amendment. The affirmative vote of the holders of a majority of the shares entitled to vote at the meeting, either in person or by proxy, will be required to approve the Amendment to the 2006 Plan as described in this Proposal 2. Abstentions will be counted toward the tabulation of votes cast on the proposal and will have the same effect as negative votes. Broker non-votes are not counted for any purpose in determining whether this proposal has been approved.

MANAGEMENT AND THE BOARD OF DIRECTORS RECOMMEND A VOTE IN FAVOR OF PROPOSAL 2.

The essential features of the 2006 Plan are outlined below:

Description of the 2006 Equity Incentive Plan

The material features of the 2006 Plan are outlined below. This summary is qualified in its entirety by reference to the complete text of the 2006 Plan. Stockholders are urged to read the actual text of the 2006 Plan in its entirety, which is set forth as **Appendix A** to this proxy statement.

Background and Purpose

The terms of the 2006 Plan provide for the grant of stock options, stock appreciation rights, restricted stock, restricted stock units, other stock-related awards, and performance awards that may be settled in cash, stock, or other property.

The 2006 Plan was adopted to provide a means by which employees, directors, and consultants may be given an opportunity to purchase our common stock to assist us in retaining the services of such persons, to secure and retain the services of persons capable of filling such positions, and to provide incentives for such persons to exert maximum efforts for our success.

Shares Available for Awards

If this Proposal 2 is approved, the total number of shares of our common stock reserved for issuance under the 2006 Plan will consist of:

- 7,196,584 shares; plus
- the number of shares subject to any stock awards under the 1999 Plan that terminate or are forfeited or repurchased and would otherwise be returned to the share reserve under the 1999 Plan.

Eligibility

The persons eligible to receive awards under the 2006 Plan consist of our employees, directors and consultants. However, incentive stock options, or ISOs, may be granted under the 2006 Plan only to our employees, including our officers who are employees.

Administration

The 2006 Plan is administered by the Board of Directors, which may in turn delegate authority to administer the plan to a committee. The Board of Directors has delegated administration of the 2006 Plan to the Compensation Committee. Subject to the terms of the 2006 Plan, the Compensation Committee determines recipients, the numbers and types of stock awards to be granted and the terms and conditions of the stock awards, including the period of their exercisability and vesting. Subject to the limitations set forth below, the Compensation Committee also determines the exercise price of options granted under the 2006 Plan. Subject to the terms of the 2006 Plan, the Compensation Committee may delegate to one or more of our officers the authority to grant stock awards to our other officers and employees. Such officer would be able to grant only the total number of stock awards specified by the Compensation Committee and such officer would not be allowed to grant a stock award to himself or herself.

The Board of Directors does not have the authority to (i) reprice any outstanding options or stock appreciation rights under the 2006 Plan, or (ii) cancel and re-grant any outstanding options or stock appreciation rights under the 2006 Plan, unless the stockholders have approved such an action within a 12-month period preceding such an event.

Stock Options

Stock options are granted pursuant to stock option agreements. Generally, the exercise price for an option cannot be less than 100% of the fair market value of the common stock subject to the option on the date of grant. On March 17, 2008, the closing price of our common stock as reported on the Nasdaq Global Market was $5.30 per share. Options granted under the 2006 Plan vest at the rate specified in the option agreement.

In general, the term of stock options granted under the 2006 Plan may not exceed ten years. Unless the terms of an optionholder's stock option agreement provide for earlier or later termination, if an optionholder's service relationship with us, or any affiliate of ours, ceases due to disability or death, the optionholder, or his or her beneficiary, may exercise any vested options for up to 12 months, after the date the service relationship ends. If an optionholder's service relationship with us, or any affiliate of ours, ceases for any reason other than disability or death, the optionholder may exercise any vested options for up to three months after the date the service

relationship ends, unless the terms of the stock option agreement provide for a longer or shorter period to exercise the option. In no event may an option be exercised after its expiration date.

Acceptable forms of consideration for the purchase of our common stock issued under the 2006 Plan is determined by the Compensation Committee and may include cash, common stock previously owned by the optionholder, payment through a broker assisted exercise or a net exercise feature, or other legal consideration approved by the Compensation Committee.

Generally, an optionholder may not transfer a stock option other than by will or the laws of descent and distribution or a domestic relations order. However, an optionholder may designate a beneficiary who may exercise the option following the optionholder's death.

Limitations

The aggregate fair market value, determined at the time of grant, of shares of our common stock with respect to ISOs that are exercisable for the first time by an optionholder during any calendar year under all of our stock plans may not exceed $100,000. The options or portions of options that exceed this limit are treated as nonqualified stock options, or NSOs. No ISO may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any affiliate unless the following conditions are satisfied:

- the option exercise price must be at least 110% of the fair market value of the stock subject to the option on the date of grant; and
- the term of any ISO award must not exceed five years from the date of grant.

In addition, no employee may be granted options or stock appreciation rights under the 2006 Plan covering more than 5,000,000 shares of our common stock in any calendar year.

Restricted Stock Awards

Restricted stock awards are granted pursuant to restricted stock award agreements. A restricted stock award may be granted in consideration for the recipient's past or future services performed for us or an affiliate of ours. Shares of our common stock acquired under a restricted stock award may be subject to forfeiture to us in accordance with a vesting schedule to be determined by the Compensation Committee. Rights to acquire shares of our common stock under a restricted stock award may be transferred only upon such terms and conditions as are set forth in the restricted stock award agreement.

Restricted Stock Unit Awards

Restricted stock unit awards are granted pursuant to restricted stock unit award agreements. Payment of any purchase price may be made in any form permitted under applicable law; however, we settle payments due to a recipient of a restricted stock unit award by delivery of shares of our common stock, by cash, by a combination of cash and stock as deemed appropriate by the Compensation Committee, or in any other form of consideration determined by the Compensation Committee and set forth in the restricted stock unit award agreement. Dividend equivalents may be credited in respect of shares of our common stock covered by a restricted stock unit award. Restricted stock unit awards may be subject to vesting in accordance with a vesting schedule to be determined by the Compensation Committee. Except as otherwise provided in the applicable restricted stock unit award agreement, restricted stock units that have not vested will be forfeited upon the participant's termination of continuous service for any reason.

Stock Appreciation Rights

Stock appreciation rights are granted through a stock appreciation rights agreement. Each stock appreciation right is denominated in common stock share equivalents. The strike price of each stock appreciation right is determined by the Compensation Committee or its authorized committee, but shall in no event be less than 100% of the fair market value of the stock subject to the stock appreciation right at the time of grant. The Compensation Committee may also impose any restrictions or conditions upon the vesting of stock appreciation rights that it deems appropriate. Stock appreciation rights may be paid in our common stock or in cash or any combination of the two, or any other form of legal consideration approved by the Compensation Committee. In general, the term of stock appreciation rights granted under the 2006 Plan may not exceed ten years. Unless the terms of a recipient's stock appreciation right agreement provide for earlier or later termination, if a stock appreciation right recipient's relationship with us, or any affiliate of ours, ceases for any reason, the recipient may exercise any vested stock appreciation right up to three months from cessation of service.

Performance Awards

The 2006 Plan provides for the grant of two types of performance awards: performance stock awards and performance cash awards. Performance awards may be granted, vest or be exercised based upon the attainment during a certain period of time of certain performance goals. All of our employees, directors and consultants are eligible to receive performance awards under the 2006 Plan. The length of any performance period, the performance goals to be achieved during the performance period, and the measure of whether and to what degree such performance goals have been attained shall be determined by the Compensation Committee. The maximum amount to be granted to any individual in a calendar year attributable to such performance awards may not exceed 5,000,000 shares of our common stock in the case of performance stock awards, or $1,000,000 in the case of performance cash awards.

In granting a performance award, the Compensation Committee sets a period of time, or a performance period, over which the attainment of one or more performance goals is measured for the purpose of determining whether the award recipient has a vested right in or to such performance award. Within the time period prescribed by Section 162(m) of the Code (typically before the 90th day of a performance period), the Compensation Committee establishes the performance goals, based upon one or more pre-established performance criteria enumerated in the 2006 Plan and described below. As soon as administratively practicable following the end of the performance period, the Compensation Committee certifies (in writing) whether the performance goals have been satisfied.

Performance goals under the 2006 Plan is determined by the Compensation Committee, based on one or more of the following performance criteria: (i) earnings per share; (ii) earnings before interest, taxes and depreciation; (iii) earnings before interest, taxes, depreciation and amortization; (iv) total stockholder return; (v) return on equity; (vi) return on assets, investment, or capital employed; (vii) operating margin; (viii) gross margin; (ix) operating income; (x) net income (before or after taxes); (xi) net operating income; (xii) net operating income after tax; (xiii) pre-tax profit; (xiv) operating cash flow; (xv) sales or revenue targets; (xvi) increases in revenue or product revenue; (xvii) expenses and cost reduction goals; (xviii) improvement in or attainment of working capital levels; (xix) economic value added (or an equivalent metric); (xx) market share; (xxi) cash flow; (xxii) cash flow per share; (xxiii) share price performance; (xxiv) debt reduction; (xxv) implementation or completion of projects or processes; (xxvi) customer satisfaction; (xxvii); stockholders' equity; and (xxviii) to the extent that an award is not intended to comply with Section 162(m) of the Code, other measures of performance selected by the Compensation Committee.

Other Stock Awards

Other forms of stock awards valued in whole or in part with reference to our common stock may be granted either alone or in addition to other stock awards under the 2006 Plan. The Compensation Committee has sole and

complete authority to determine the persons to whom and the time or times at which such other stock awards are granted, the number of shares of our common stock to be granted and all other conditions of such other stock awards. Other forms of stock awards may be subject to vesting in accordance with a vesting schedule to be determined by the Compensation Committee.

Changes to Capital Structure

In the event that there is a specified type of change in our capital structure not involving the receipt of consideration by us, such as a stock split or stock dividend, the number of shares reserved under the 2006 Plan and the number of shares and exercise price or strike price, if applicable, of all outstanding stock awards will be appropriately adjusted.

Corporate Transactions

In the event of certain corporate transactions, all outstanding stock awards under the 2006 Plan may be assumed, continued or substituted for by any surviving entity. If the surviving entity elects not to assume, continue or substitute for such awards, the vesting of such stock awards held by persons whose service with us has not terminated generally will be accelerated in full and such stock awards will terminate if and to the extent not exercised at or prior to the effective time of the corporate transaction and our repurchase rights will generally lapse.

Plan Amendments

The Compensation Committee has the authority to amend or terminate the 2006 Plan. However, no amendment or termination of the plan will adversely affect any rights under awards already granted to a participant unless agreed to by the affected participant. We will obtain stockholder approval of any amendment to the 2006 Plan as required by applicable law.

U.S. Federal Income Tax Consequences

The information set forth below is a summary only and does not purport to be complete. The information is based upon current federal income tax rules and therefore is subject to change when those rules change. Because the tax consequences to any recipient may depend on his or her particular situation, each recipient should consult the recipient's tax adviser regarding the federal, state, local, and other tax consequences of the grant or exercise of an award or the disposition of stock acquired as a result of an award. The 2006 Plan is not qualified under the provisions of Section 401(a) of the Code, and is not subject to any of the provisions of the Employee Retirement Income Security Act of 1974. Our ability to realize the benefit of any tax deductions described below depends on our generation of taxable income.

Nonqualified Stock Options

Generally, there is no taxation upon the grant of a nonqualified stock option where the option is granted with an exercise price equal to the fair market value of the underlying stock on the grant date. On exercise, an optionee will recognize ordinary income equal to the excess, if any, of the fair market value on the date of exercise of the stock over the exercise price. If the optionee is employed by us or one of our affiliates, that income will be subject to withholding tax. The optionee's tax basis in those shares will be equal to their fair market value on the date of exercise of the option, and the optionee's capital gain holding period for those shares will begin on that date.

Subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code and the satisfaction of a tax reporting obligation, we will generally be entitled to a tax deduction equal to the taxable ordinary income realized by the optionee.

Incentive Stock Options

The 2006 Plan provides for the grant of stock options that qualify as "incentive stock options," as defined in Section 422 of the Code. Under the Code, an optionee generally is not subject to ordinary income tax upon the grant or exercise of an ISO. If the optionee holds a share received on exercise of an ISO for more than two years from the date the option was granted and more than one year from the date the option was exercised, which is referred to as the required holding period, the difference, if any, between the amount realized on a sale or other taxable disposition of that share and the holder's tax basis in that share will be long-term capital gain or loss.

If, however, an optionee disposes of a share acquired on exercise of an ISO before the end of the required holding period, which is referred to as a disqualifying disposition, the optionee generally will recognize ordinary income in the year of the disqualifying disposition equal to the excess, if any, of the fair market value of the share on the date the ISO was exercised over the exercise price. However, if the sales proceeds are less than the fair market value of the share on the date of exercise of the option, the amount of ordinary income recognized by the optionee will not exceed the gain, if any, realized on the sale. If the amount realized on a disqualifying disposition exceeds the fair market value of the share on the date of exercise of the option, that excess will be short-term or long-term capital gain, depending on whether the holding period for the share exceeds one year.

For purposes of the alternative minimum tax, the amount by which the fair market value of a share of stock acquired on exercise of an ISO exceeds the exercise price of that option generally will be an adjustment included in the optionee's alternative minimum taxable income for the year in which the option is exercised. If, however, there is a disqualifying disposition of the share in the year in which the option is exercised, there will be no adjustment for alternative minimum tax purposes with respect to that share. If there is a disqualifying disposition in a later year, no income with respect to the disqualifying disposition will be included in the optionee's alternative minimum taxable income for that year. In computing alternative minimum taxable income, the tax basis of a share acquired on exercise of an ISO is increased by the amount of the adjustment taken into account with respect to that share for alternative minimum tax purposes in the year the option is exercised.

We are not allowed an income tax deduction with respect to the grant or exercise of an ISO or the disposition of a share acquired on exercise of an ISO after the required holding period. If there is a disqualifying disposition of a share, however, we are allowed a deduction in an amount equal to the ordinary income includible in income by the optionee, subject to Section 162(m) of the Code and provided that amount constitutes an ordinary and necessary business expense for us and is reasonable in amount, and either the employee includes that amount in income or we timely satisfy our reporting requirements with respect to that amount.

Restricted Stock Awards

Generally, the recipient of a restricted stock award will recognize ordinary compensation income at the time the stock is received equal to the excess, if any, of the fair market value of the stock received over any amount paid by the recipient in exchange for the stock. If, however, the stock is not vested when it is received (for example, if the employee is required to work for a period of time in order to have the right to sell the stock), the recipient generally will not recognize income until the stock becomes vested, at which time the recipient will recognize ordinary compensation income equal to the excess, if any, of the fair market value of the stock on the date it becomes vested over any amount paid by the recipient in exchange for the stock. A recipient may, however, file an election with the Internal Revenue Service, within 30 days of his or her receipt of the stock award, to recognize ordinary compensation income, as of the date the recipient receives the award, equal to the excess, if any, of the fair market value of the stock on the date the award is granted over any amount paid by the recipient in exchange for the stock.

The recipient's basis for the determination of gain or loss upon the subsequent disposition of shares acquired from stock awards will be the amount paid for such shares plus any ordinary income recognized either when the stock is received or when the stock becomes vested.

Subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code and the satisfaction of a tax reporting obligation, we will generally be entitled to a tax deduction equal to the taxable ordinary income realized by the recipient of the stock award.

Stock Appreciation Rights

We may grant under the 2006 Plan stock appreciation rights separate from any other award or in tandem with other awards under the 2006 Plan.

Where the rights are granted with a strike price equal to the fair market value of the underlying stock on the grant date and where the recipient may only receive the appreciation inherent in the stock appreciation rights in shares of our common stock, the recipient will recognize ordinary compensation income equal to the fair market value of the stock received upon such exercise. If the recipient may receive the appreciation inherent in the stock appreciation rights in cash or other property and the stock appreciation right has been structured to conform to the requirements of Section 409A of the Code, then the cash will be taxable as ordinary compensation income to the recipient at the time that the cash is received.

Subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code, and the satisfaction of a tax reporting obligation, we will generally be entitled to a tax deduction equal to the taxable ordinary income realized by the recipient of the stock appreciation right.

Restricted Stock Units

Generally, the recipient of a stock unit structured to conform to the requirements of Section 409A of the Code or an exception to Section 409A of the Code will recognize ordinary compensation income at the time the stock is delivered equal to the excess, if any, of the fair market value of the shares of our common stock received over any amount paid by the recipient in exchange for the shares of our common stock. To conform to the requirements of Section 409A of the Code, the shares of our common stock subject to a stock unit award may only be delivered upon one of the following events: a fixed calendar date (or dates), separation from service, death, disability or a change of control. If delivery occurs on another date, unless the stock units qualify for an exception to the requirements of Section 409A of the Code, in addition to the tax treatment described above, the recipient will owe an additional 20% tax and interest on any taxes owed.

The recipient's basis for the determination of gain or loss upon the subsequent disposition of shares acquired from stock units, will be the amount paid for such shares plus any ordinary income recognized when the stock is delivered.

Subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code and the satisfaction of a tax reporting obligation, we will generally be entitled to a tax deduction equal to the taxable ordinary income realized by the recipient of the stock award.

Section 162 Limitations

Section 162(m) of the Code denies a deduction to any publicly held corporation for compensation paid to certain "covered employees" in a taxable year to the extent that compensation to such covered employee exceeds $1 million. It is possible that compensation attributable to stock awards, when combined with all other types of compensation received by a covered employee from us, may cause this limitation to be exceeded in any particular year. For purposes of Section 162(m) of the Code, the term "covered employee" means our chief executive officer and our four highest compensated officers as of the end of a taxable year as disclosed in our SEC filings. Please see the Summary Compensation Table below for a current listing of covered employees.

Certain kinds of compensation, including qualified "performance-based" compensation, are disregarded for purposes of the Section 162(m) of the Code deduction limitation. In accordance with United States treasury regulations issued under Section 162(m) of the Code, compensation attributable to certain stock awards will qualify as performance-based compensation if the award is granted by a committee of the Board of Directors consisting solely of "outside directors" and the stock award is granted (or exercisable) only upon the achievement (as certified in writing by the committee) of an objective performance goal established in writing by the committee while the outcome is substantially uncertain, and the material terms of the 2006 Plan under which the award is granted is approved by stockholders. A stock option or stock appreciation right may be considered "performance-based" compensation as described in the previous sentence or by meeting the following requirements: the incentive compensation plan contains a per-employee limitation on the number of shares for which stock options and stock appreciation rights may be granted during a specified period, the material terms of the plan are approved by the shareholders, and the exercise price of the option or right is no less than the fair market value of the stock on the date of grant.

The regulations under Section 162(m) of the Code require that the directors who serve as members of the committee must be "outside directors." The 2006 Plan provides that directors serving on the committee may be "outside directors" within the meaning of Section 162(m) of the Code. This limitation would exclude from the committee directors who are (i) current employees of ours or one of our affiliates, (ii) former employees of ours or one of our affiliates who are receiving compensation for past services to us or one of our affiliates (other than benefits under a tax-qualified pension plan), (iii) current and former officers of ours or one of our affiliates, (iv) directors currently receiving direct or indirect remuneration from us or one of our affiliates in any capacity other than as a director, and (v) any other person who is not otherwise considered an "outside director" for purposes of Section 162(m) of the Code. The definition of an "outside director" under Section 162(m) of the Code is generally narrower than the definition of a "non-employee director" under Rule 16b-3 of the Securities Exchange Act of 1934, as amended, or the Exchange Act. The Compensation Committee is currently comprised solely of "outside directors" within the meaning of Section 162(m) of the Code.

Securities Authorized for Issuance under Equity Compensation Plans

The following table provides certain information with respect to all of our equity compensation plans in effect as of December 31, 2007.

Equity Compensation Plan Information

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	5,980,236	$6.19	2,655,837(1)(2)
Equity compensation plans not approved by security holders	— (3)	— (3)	—
Total	5,980,236	$6.19	2,655,837

(1) Of the 2,655,837 shares available for issuance, 792,790 are reserved for issuance under our 1999 Employee Stock Purchase Plan, or ESPP.

(2) Our ESPP contains so called "evergreen" provisions providing for annual increases to its respective share reserves. The number of shares to be added annually to the ESPP is the lesser of (i) 166,667; or (ii) 1% of our outstanding common stock as of December 31, 2007.

(3) Excludes outstanding options and warrants that were acquired in conjunction with our acquisition of Gemini Genomics in 2001 and Axiom Biotechnologies in 2002. There are 8,296 options outstanding in connection with Axiom Biotechnologies at a weighted average exercise price of $8.87. In connection with our acquisition of Gemini Genomics, there are 130,770 options outstanding with a weighted average exercise price of $71.48.

New Plan Benefits

As of the date of the attached Notice of Annual Meeting of Stockholders, no options or other Stock Awards have been granted on the basis of the 1,500,000 share increase for which stockholder approval is sought under this Proposal 2.

PROPOSAL 3

RATIFICATION OF SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee of the Board of Directors has selected Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2008 and has further directed that management submit the selection of our independent registered public accounting firm for ratification by the stockholders at the Annual Meeting. Ernst & Young LLP has audited our financial statements since 1997. Representatives of Ernst & Young LLP are expected to be present at the Annual Meeting. They will have an opportunity to make a statement if they so desire and will be available to respond to appropriate questions.

Neither our Bylaws nor our other governing documents or law require stockholder ratification of the selection of Ernst & Young LLP as our independent registered public accounting firm. However, our Audit Committee is submitting the selection of Ernst & Young LLP to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, the Audit Committee will reconsider whether or not to retain that firm. Even if the selection is ratified, the Audit Committee in its discretion may direct the appointment of a different independent registered public accounting firm at any time during the year if they determine that such a change would be in our best interests or in the best interests of our stockholders.

The affirmative vote of the holders of a majority of the shares present in person or represented by proxy and entitled to vote at the annual meeting will be required to ratify the selection of Ernst & Young LLP. Abstentions will be counted toward the tabulation of votes cast on proposals presented to the stockholders and will have the same effect as negative votes. Broker non-votes are counted towards a quorum, but are not counted for any purpose in determining whether this matter has been approved.

Principal Accountant Fees and Services

The following table represents aggregate fees billed to us for fiscal years ended December 31, 2007 and 2006, by Ernst & Young LLP, our principal independent registered public accounting firm.

	2007 Actual Fees	2006 Actual Fees
Audit Fees(1)		
Audit of consolidated financial statements and services associated with attestation of management's assertion over internal controls required by Section 404 of Sarbanes Oxley Act	$ 696,360	$555,000
Timely quarterly reviews	$ 101,498	$ 85,610
SEC filings, including comfort letters, consents and comment letters	$ 168,661	$ 12,034
Accounting consultations on matters addressed during the audit or interim reviews	$ 8,300	$ 13,020
Total Audit Fees	$ 974,819	$665,664
Audit Related Fees(2)		
Employee benefit plans	—	—
Subsidiary statutory audits	$ 55,000	$ 30,000
General assistance with implementation of the requirements of SEC rules or listing standards promulgated pursuant to the Sarbanes Oxley Act	—	$ 12,259
Accounting consultation in connection with acquisitions	—	—
Total Audit Related Fees	$ 55,000	$ 42,259
Tax Fees(2)		
Tax compliance services	$ 36,520	$108,655
Tax Planning	—	—
Total Tax Fees	$ 36,520	$108,655
Total Fees	$1,066,339	$816,578

(1) Includes fees and expenses related to the fiscal year audit and interim reviews, notwithstanding when the fees and expenses were billed or when the services were rendered. Fiscal year 2007 audit fees are preliminary, and subject to final settlement based upon actual hours incurred versus budgeted.

(2) Includes fees and expenses for services rendered from January through December of the fiscal year, notwithstanding when the fees and expenses were billed. Fiscal year 2007 tax compliance fees are preliminary, and subject to final settlement based upon actual hours incurred versus budgeted.

All fees described above were approved by the audit committee.

During fiscal year ended December 31, 2007, none of the total hours expended on our financial audit by Ernst & Young LLP were provided by persons other than Ernst & Young LLP's full-time permanent employees.

Pre-Approval Policies and Procedures.

The Audit Committee pre-approves all audit and non-audit services rendered by our independent registered public accounting firm. The Audit Committee generally pre-approves specified services up to specified amounts. Under its charter, the Audit Committee may delegate the pre-approval of services to one or more of its members. Any such pre-approval must be reported to the full Audit Committee at its next meeting.

The Audit Committee has determined that the rendering of the services other than audit services by Ernst & Young LLP is compatible with maintaining the principal accountant's independence.

THE BOARD OF DIRECTORS RECOMMENDS
A VOTE IN FAVOR OF PROPOSAL 3.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding the beneficial ownership of our common stock as of March 17, 2008 by: (i) each director and nominee for director; (ii) each of the named executive officers listed in the Summary Compensation Table; (iii) all of our executive officers and directors as a group; and (iv) each person, or group of affiliated persons, known by us to beneficially own more than five percent of our common stock.

Beneficial ownership has been determined in accordance with Rule 13d-3 under the 1934 Act. Under this rule, certain shares may be deemed to be beneficially owned by more than one person (if, for example, persons share the power to vote or the power to dispose of the shares). Shares are deemed to be beneficially owned by a person if the person has the right to acquire shares (for example, upon exercise of an option or warrant) within 60 days of the date of the information provided. In computing the percentage ownership of any person, the number of shares is deemed to include the number of shares beneficially owned by such person (and only such person) by reason of such acquisition rights. As a result, the percentage of outstanding shares of any person as shown in the following table does not necessarily reflect the person's actual voting power at any particular date.

Except as otherwise noted below, the address for each person or entity listed in the table is c/o Sequenom, Inc., 3595 John Hopkins Court, San Diego, California 92121.

	Beneficial Ownership(1)	
Beneficial Owner	**Number of Shares**	**Percent of Total**
ComVest Investment Partners II LLC (2) One North Clematis Street, Suite 300 West Palm Beach, Florida 33401	8,057,374	14.0%
Pequot Private Equity Fund IV, L.P. (3) c/o Pequot Capital Management, Inc. 500 Nyala Road, Westport, Connecticut 06880	7,333,333	12.7%
LB I Group Inc. (4) c/o Lehman Brothers Inc., 399 Park Avenue, Ninth Floor New York, New York 10022	6,272,726	10.9%
Davidson Kempner Capital Management LLC (5) 65 East 55th Street, 19th Floor New York, NY 10022	4,034,713	7.0%
Siemens Venture Capital GMBH (6) 801 Boylston Street, 5th Floor Boston, Massachusetts 02116	3,878,787	6.7%
Morgan Stanley 1585 Broadway New York, NY 10036	2,283,024	4.0%
Directors and Executive Officers		
Harry Stylli, Ph.D. (7)	933,710	1.6%
Charles R. Cantor, Ph.D. (8)	332,661	*
John Sharp (9)	6,690	*
Ernst-Günter Afting, Ph.D., M.D. (10)	86,666	*
Harry F. Hixson, Jr., Ph.D. (11)	48,334	*
Ronald M. Lindsay, Ph.D. (12)	46,667	*
Paul Hawran (13)	166,006	*
Elizabeth Dragon, Ph.D. (14)	66,610	*
Richard A. Lerner, M.D.	—	*
Steve Owings (15)	30,788	*
Kathleen M. Wiltsey	—	*
John Fazio	—	*
All directors and executive officers as a group (17 persons) (16)	2,070,983	3.6%

* Less than one percent.

(1) This table is based upon information supplied by officers, directors and principal stockholders and Schedules 13D and 13G filed with the SEC. To our knowledge, except as indicated in the footnotes to this table and pursuant to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them. Applicable percentages are based on 45,403,927 shares outstanding on March 17, 2008 adjusted as required by SEC rules.

(2) Includes 3,818,181 shares of our common stock issuable pursuant to warrants exercisable within 60 days of March 17, 2008 by ComVest Investment Partners II LLC. ComVest Investment Partners II LLC, a Delaware limited liability company ("ComVest") is a private investment company. The managing member of ComVest is ComVest II Partners LLC, a Delaware limited liability company ("ComVest II Partners"), the managing member of which is ComVest Group Holdings, LLC, a Delaware limited liability company ("CGH"). Michael Falk ("Falk") is the Chairman and principal member of CGH. Robert Priddy ("Priddy") is a member of ComVest II Partners. Falk and Priddy, by virtue of their status as managing members of ComVest II Partners (the managing member of ComVest) and as the principal members of ComVest and ComVest II Partners, may be deemed to have indirect beneficial ownership of the shares of common stock beneficially owned by ComVest. However, Falk and Priddy disclaim any beneficial ownership of such shares.

(3) Includes 2,791,950 shares of our common stock issuable pursuant to warrants exercisable within 60 days of March 17, 2008 by Pequot Private Equity Fund IV, L.P. Pequot Capital Management, Inc. holds voting and investment power for all shares held by Pequot Private Equity Fund IV, L.P. (the "Fund").

(4) Includes 2,727,272 shares of our common stock issuable pursuant to warrants exercisable within 60 days of March 17, 2008 by LB I Group Inc. LB I Group Inc. is a wholly owned subsidiary of Lehman Brothers Inc., a registered broker-dealer. Lehman Brothers Inc. is a wholly owned subsidiary of Lehman Brothers Holdings Inc., a public reporting company.

(5) Includes shares held by affiliates of Davidson Kempner Capital Management LLC in the following amounts: 156,427 shares held by Davidson Kemper Partners, 281,041 shares held by Davidson Kemper Institutional Partners, L.P., 16,139 shares held by M.H. Davidson & Co., 536,030 shares held by Davidson Kemper International, Ltd., 8,070 shares held by Serena Limited, 1,243,870 shares held by Davidson Kempner Healthcare Fund LP, 1,793,136 shares held by Davidson Kempner Healthcare International Ltd. Messrs. Thomas L. Kempner, Jr., Marvin H. Davidson, Stephen M. Dowicz, Scott E. Davidson, Michael J. Leffell, Timothy I. Levart, Robert J. Brivio, Jr., Anthony A. Yoseloff, Eric P. Epstein and Avram Z. Friedman (collectively, the "Principals"), are the general partners of M.H. Davidson & Co. and MHD Management Co. ("MHD"), the general partner of Davidson Kempner Partners, the sole managing members of Davidson Kempner International Advisors, L.L.C. ("DKIA"), the investment manager of each of Davidson Kempner International, Ltd. and Serena Ltd., the sole stockholders of Davidson Kempner Advisors Inc. ("DKAI"), the general partner of Davidson Kempner Institutional Partners, L.P., the managing members of DK Group LLC ("DKG"), the general partner of Davidson Kempner Healthcare Fund LP, and the limited partners of DK Management Partners LP ("DKMP"), the investment manager of Davidson Kempner Healthcare International Ltd. Each of the Principals, MHD, DKIA, DKAI, DKG and DKMP disclaim all beneficial ownership as affiliates of a registered investment advisor, and, in any case, disclaim all beneficial ownership except as to the extent of their pecuniary interest in the shares.

(6) Includes 1,454,545 shares of our common stock issuable pursuant to warrants exercisable within 60 days of March 17, 2008 by Siemens Venture Capital GMBH. Siemens Venture Capital GmbH, a company with limited liability organized under the laws of the Federal Republic of Germany, is a wholly owned subsidiary of Siemens Aktiengesellschaft, a public reporting stock corporation organized under the laws of the Federal Republic of Germany.

(7) Includes 814,368 shares of common stock that Dr. Stylli has the right to acquire from us upon the exercise of outstanding stock options within 60 days after March 17, 2008.

(8) Includes 142,368 shares of common stock held of record by trusts related to Dr. Cantor and beneficially owned by Dr. Cantor and 190,293 shares of common stock that Dr. Cantor has the right to acquire from us upon the exercise of outstanding stock options within 60 days after March 17, 2008.

(9) Includes 6,690 shares of common stock that Mr. Sharp owns as of March 17, 2008. Mr. Sharp's employment with the Company terminated in April 2007.

(10) Includes 51,667 shares of common stock that Dr. Afting has the right to acquire from us upon the exercise of outstanding stock options within 60 days after March 17, 2008.

(11) Includes 48,334 shares of common stock that Dr. Hixson has the right to acquire from us upon the exercise of outstanding stock options within 60 days after March 17, 2008.

(12) Includes 41,667 shares of common stock that Dr. Lindsay has the right to acquire from us upon the exercise of outstanding stock options within 60 days after March 17, 2008.

(13) Includes 60,887 shares of common stock that Mr. Hawran has the right to acquire from us upon the exercise of outstanding stock options within 60 days of March 17, 2008.

(14) Includes 60,625 shares of common stock that Dr. Dragon has the right to acquire from us upon the exercise of outstanding stock options within 60 days of March 17, 2008.

(15) Includes 28,619 shares of common stock that Mr. Owings has the right to acquire from us upon the exercise of outstanding stock options within 60 days of March 17, 2008.

(16) Includes the 1,566,115 aggregate shares of common stock referred to in footnotes (7), (8), (9), (10), (11), (12), (13), (14) and (15) that such persons have the right to acquire from us upon the exercise of outstanding options and warrants within 60 days after March 17, 2008.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the 1934 Act requires our directors and executive officers, and persons who own more than ten percent of a registered class of our equity securities, to file with the SEC initial reports of ownership and reports of changes in ownership of our common stock and other equity securities. Our officers, directors and greater than ten percent stockholders are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file. To our knowledge, based solely on a review of the copies of such reports furnished to us and written representations that no other reports were required, during the fiscal year ended December 31, 2007, all Section 16(a) filing requirements applicable to our officers, directors and greater than ten percent beneficial owners were complied with.

EXECUTIVE COMPENSATION

The following discussion covers the compensation arrangements for our Named Executive Officers ("NEOs") and directors and includes a general discussion and analysis of our executive compensation program as well as a series of tables containing specific compensation information for our NEOs and directors. This discussion contains forward looking statements that are based upon our current executive compensation program, policies and methodologies. We may make changes in this program and these policies and methodologies in the future, and if made, we could have materially different compensation arrangements in the future.

Compensation Discussion and Analysis

Executive compensation philosophy

Our Compensation Committee establishes the executive compensation philosophy for our Company. The Compensation Committee has designed our executive compensation program to help us achieve our goals and objectives, including:

- Aligning our executive compensation with our business objectives;
- Making payments or providing other incentives based on our performance as measured against annual company goals set by our full Board of Directors as well as individual performance objectives;
- Attracting, retaining, motivating and rewarding executive officers (including the NEOs) and maintaining a stable management team comprised of individuals with substantial industry experience; and
- Aligning the financial interests of our executives with the long-term financial interests of our stockholders.

To accomplish these goals and objectives, we have created an executive compensation program comprised of three primary elements: base pay, an annual bonus program and a long term incentive program which uses equity awards. Our change in control severance benefit plan and deferred compensation plan, in which each of our NEOs is eligible to participate, are also important elements of our executive compensation program.

In October 2007, our Compensation Committee approved a change in control severance benefit plan which provides three tiers of benefits for executive officers in the event that there is a change in control of our Company and an executive loses his or her job. This plan was created to replace our prior change in control severance benefit plan which expired in July 2007. All of the NEOs participate in the plan except for Mr. Sharp whose employment with us terminated in April 2007. Although Dr. Stylli has change in control provisions in his employment contract, such provisions have expired and are superseded by Dr. Stylli's participation in the October 2007 change in control severance benefit plan. We believe that the change in control benefits under our plan are an important component of our overall executive compensation program because these benefits help us retain executive talent and, in the event of a potential change of control, allow the executives to focus on the potential transaction without concern for their personal near-term financial future. These change in control benefits are discussed in more detail in the "Change in Control Arrangements" section below and in the "Post-Employment Payments" section and table below.

In April 2007, our Compensation Committee and our full Board of Directors approved a deferred compensation plan that allows eligible executives, including our NEOs, to defer receipt of their salary and/or annual performance bonuses, and allows directors to defer receipt of their retainer and meeting fees, into bookkeeping accounts until withdrawal at a future time selected by the participant with the associated tax consequences also being deferred until the time of withdrawal. This deferred compensation plan is also a key component of our executive compensation program because it provides additional tax and financial planning flexibility for eligible executives, including our NEOs, at low incremental cost to the Company. This plan is discussed further under the Nonqualified Deferred Compensation section below.

The Compensation Committee's role in the executive compensation process

The Compensation Committee of our Board of Directors is comprised of three independent directors: Ronald M. Lindsay, Ph.D., Chairman of the Committee; Harry F. Hixson, Jr., Ph.D., and as of February 2008 Richard A. Lerner, M.D. Prior to Dr. Lerner joining the Committee, Ms. Kathleen M. Wiltsey served on the Committee from July 2007 through February 2008, and Patrick G. Enright served on the Committee prior to his resignation as a director in July 2007. The Committee has responsibilities delegated to it by our Board of Directors as set forth in the Charter of the Compensation Committee which may be found in the Corporate Governance section under Investors on our website at *www.sequenom.com*. Among its responsibilities, the Committee provides guidance with respect to the purpose and principles behind the company's compensation decisions and overall compensation philosophy and objectives, and the Committee oversees our compensation policies, plans, and programs, and reviews and determines executive officer compensation.

Our Compensation Committee is actively involved in our executive compensation process. The Compensation Committee used the services of an external compensation consultant in 2007 to assist the Committee with its executive compensation determinations. The Committee met nine times during 2007. During these meetings the Committee explored various alternatives to portions of the executive compensation program in addition to its regular duties of monitoring and approving compensation levels, approving the terms of compensation arrangements for new executives, and reviewing corporate goals as they relate to executive compensation. In addition to these meetings, throughout 2007 our Chief Executive Officer, Vice President of Human Resources, and Compensation Committee members were involved in numerous discussions regarding compensation matters. The Compensation Committee maintains a calendar to make sure that selected matters (such as compensation strategy, base pay, variable pay, and equity awards) are reviewed on an annual basis.

With respect to the annual bonus program, our Board of Directors, with input from our executive officers, defines measurable performance goals for the Company each year. Our Compensation Committee considers input from the full Board of Directors, applies weighting to each goal in view of the overall importance of each goal to the Company and establishes incentive compensation parameters that reward performance goal achievement.

The components of our executive compensation program

Our executive compensation program consists of three main components: base pay; a cash and/or stock based annual incentive program ("annual bonus"); and stock options granted at fair market value to provide longer term incentives through appreciation in our stock. We also provide our executive officers, including NEOs, with the same package of employee benefits that are provided to all full time employees, including health insurance, group term life and disability insurance. From time to time, NEOs may receive additional perquisites, as discussed further below and referenced in the Summary Compensation Table.

We have selected each of the executive compensation components for the following reasons:

- Taken as a whole, the components of the executive compensation program (base pay, annual bonus and equity grants) are comparable to the programs offered by other companies of our size in the life sciences industry; therefore, our program helps us attract new executive talent and retain, motivate, and reward the executives that we currently employ.
- The annual bonus program rewards executives for the satisfaction of Company goals that are established by the full Board of Directors. Compensation under this program directly reflects the Company's satisfaction of corporate objectives and reflects individual overall performance in the opinion of our Chief Executive Officer and the Compensation Committee members. Evaluation of individual overall performance for our Chief Executive Officer is performed solely by the Compensation Committee and in executive session deliberations without the Chief Executive Officer present. Payments under this program, partially paid in restricted stock for 2007, underscores our desire to have our executives focus their efforts on annual and longer-term company goals with an employment retention element, and to

take actions that maximize stockholder value. Our Compensation Committee rewards executives only in the event of satisfactory Company and individual performance.

- Stock option grants to purchase our common stock serve three purposes: first, they are a retention device, as the executive must continue employment with us to vest his or her options and to exercise the options to realize value; second, they align the interests of management with those of our stockholders with the goal of creating long term growth and value for the Company; and third they allow us to attract and recruit new executives.

How the amount of each component of compensation is determined

Base Pay

The Compensation Committee reviews the base salary of each NEO as well as other executives on an annual basis. It is the Compensation Committee's intent to maintain base salary levels for executives at approximately the 50th percentile of the level of pay for executives with similar duties at similarly sized companies in the life sciences industry, but with flexibility to approach up to or about the 75th percentile as may be needed to recruit or retain certain key executives. The 50th percentile was chosen as a base salary target by the Compensation Committee in order to balance our needs to be able to recruit exceptionally talented executives and to be competitive in the market, with our need to preserve cash and limit expenditures in view of our limited financial resources.

During 2007 our Compensation Committee approved the engagement of an outside compensation consultant to assist the Compensation Committee with its compensation determinations for our executive officers, including the NEOs, and other employees. The consultant benchmarked our current executive salaries against three different market data sources: the Radford Biotechnology Compensation Report using a blend of data from companies with 50-149 employees and 150-500 employees; the Biotech Employee Development Coalition (BEDC) Survey for companies with 100-250 employees; and a peer group list of companies generated by the consultant including talent and technology competitors. The peer group companies included Illumina, Digene, Luminex, Cepheid, Genomic Health, Caliper Life Sciences, Cholestech, Monogram Biosciences, Iris International, Third Wave Technologies, Neogen, Harvard Bioscience, Zila, Nanogen, Heska, New Brunswick Scientific, and Gene Logic. A blend of the Radford Report data was used by our consultant because the size of our Company was at the boundaries of the respective upper and lower ends of the total number of employees in the stratified Radford Report data.

The consultant reported the benchmarking results to the Compensation Committee and our Chief Executive Officer. In consideration of the consultant's benchmarking data, our Chief Executive Officer presented the Compensation Committee with proposals for an annual base pay increase for the NEOs (as well as other executives) except for himself. Only executives with at least six months of service were eligible for a base pay increase. Factors included in our Chief Executive Officer's proposals to the Committee were the current NEO salaries compared against the 50th percentile data, a general industry historical norm of an average merit increase per year of four to five percent, and specific employee performance, goal achievement, and contribution to overall corporate goal achievement. In view of the data and input provided by the compensation consultant and the recommendations by our Chief Executive Officer (such recommendations only with respect to the Chief Executive Officer's direct reports), the Committee focused on various factors, including individual and corporate performance, the competitive market for the particular position, levels of responsibility, prior experience, breadth of industry knowledge and the relative pay for the position in the marketplace (as evidenced by the data provided by the compensation consultant). Increases in base pay and differences in increases among the NEOs and other executives were related to individual performance, particular department performance, internal pay equity, and survey information. Amounts realized in a prior year from annual bonuses or equity awards were not a factor in determining current year base pay increases. The Committee then established the base pay for our NEOs including our Chief Executive Officer. When the Committee discussed or evaluated compensation for our Chief Executive Officer, the Compensation Committee met in executive session with the compensation consultant but without our Chief Executive Officer present.

In consideration of the factors described above, on average, the base pay approved by the Compensation Committee for all of the NEOs (except Mr. Sharp whose employment terminated in April 2007 and did not receive an increase in base salary during 2007) was in a range between the 50th and 60th percentile based on the market data provided by the consultant, and the percentage increase in base salary during 2007 for each NEO is as follows:

Dr. Stylli	5%
Mr. Hawran	0% (employed for less than 6 months)
Dr. Cantor	5.2%
Dr. Dragon	4.2%
Mr. Owings	0% (employed for less than 6 months)

Annual Bonus

At the beginning of 2007, our full Board of Directors, with input provided by our executive officers, established our Company goals for the year. The Compensation Committee then reviewed and considered a proposed Company-wide (including NEOs) bonus program in view of the Company goals, including proposed weighting of the various Company goals for annual bonus achievement.

The Company goals approved by the Compensation Committee for 2007 for purposes of annual bonus achievement included:

- The completion of a round of corporate financing;
- A stated increase in Company-wide revenue over 2006, as well as specific stated minimum revenues for MassARRAY system sales, contract research services sales, and consumables sales;
- A stated maximum cash usage amount for the year;
- A stated percentage improvement in gross margin;
- New product launches including a) through a licensee launching a prenatal Rhesus D test on an RT-PCR platform; b) transferring gender and Rhesus D tests for use on our MassARRAY platform to commercial partners; c) a new liquid handling nanodispenser for the MassARRAY system; and d) a novel sequencing product and application for use with our MassARRAY system platform;
- Entry into a strategic partnership agreement with short-term significant commercial opportunity at a stated annual revenue amount; and
- Specified research and development initiatives directed to a) proof of concept for specified intermediate technical steps, including fetal DNA enrichment, related to developing commercially viable tests for quantitative genomic tests for our prenatal diagnostics initiatives including Down syndrome; and b) alpha testing a new high multiplex genotyping solution.

The goals were stretch goals set above expectations, and challenging to meet, particularly for the financial performance goals as compared to 2006, and particularly for the product launch and research and development goals in view of the Company's available manpower resources and the technical hurdles to be overcome. Approximately 50% of the weighting was applied to the financial goals, particularly revenues, and approximately 50% of the weighting was applied to new product launches and the research and development initiatives, particularly for prenatal diagnostics. Although our Board of Directors and our Compensation Committee have the discretion to make adjustments to our Company goals during the year, they generally believe that once our Company goals are established, they should not be changed. Two of the Company goals were adjusted during 2006. The product launch of a novel sequencing product and application for use with our MassARRAY platform was deferred in place of the launch of a new version of Typer operating software for running various applications on the MassARRAY platform. This adjustment was driven by customer feedback and the need for an expedited

solution. Also, a research and development initiative for fetal DNA enrichment for quantitative genomic tests was substituted and superseded by an alternative and potentially preferable technical approach, for certain tests, using RNA. This adjustment was driven by new experimental data.

We maintain target levels for annual bonus awards. Target levels for an annual bonus award for Dr. Stylli, Mr. Hawran, Dr. Dragon, and Mr. Owings are established in their respective written agreements. Our external compensation consultant reported benchmarking survey market data (see the sources above under base pay) to the Compensation Committee for target annual bonuses as a percent of annual base salary for the NEOs and other executives. Our Chief Executive Officer provides input to the Committee on recommended target annual bonuses for the NEOs who report to him. In determining target levels, the Committee considers the benchmarking information provided by the consultant, the input from our Chief Executive Officer, the target levels set forth in the Company's written agreements with the NEOs, the experience of the particular NEO, the NEO's authority and responsibility, the value of the particular NEO to our Company as a whole and to our Company's key business initiatives, and the Committee then establishes appropriate target levels. The 50th percentile was chosen by the Committee as a maximum annual bonus target in order to balance our needs to be able to recruit exceptionally talented executives and to be competitive in the market, with our need to preserve cash and limit expenditures in view of our limited financial resources. The target annual bonuses for all of the NEOs are either at or below the 50th percentile market data and were not increased following external consultant review compared to the targets for 2006. This is reflective of the Committee's recognition of the Company's financial position and desire to emphasize cash management and to instead target a higher market percentile for equity awards.

If the established Company goals are attained, our Compensation Committee determines whether our Chief Executive Officer, our other NEOs and our other executive officers have each individually performed satisfactorily to warrant a bonus payment for the year. Our Chief Executive Officer proposes to the Compensation Committee individual annual bonus awards for the NEOs who report to him, as well as our other executives. He considers factors such as level of commitment, judgment, leadership, consistency, individual achievements during the year and other demonstrative factors. Our Compensation Committee solely determines our Chief Executive Officer's annual bonus. Our Chief Executive Officer's annual bonus is primarily determined based upon achievement of overall corporate goals.

For 2007, the Compensation Committee determined that 80% of our Company goals were satisfied, with most but not all of the financial, product launch, and research and development goals being met, and that overall executive performance warranted bonuses at 80% of the target bonus amount had all of the Company goals been satisfied, subject to further adjustment for individual performance considerations, and subject to reduction on a prorata basis for NEOs hired during 2007 and employed for less than the full year 2007. The Committee considered input from our Chief Executive Officer with respect to individual performance considerations for the NEOs that reported to him, considered the individual performance of our Chief Executive Officer, and authorized payment of annual bonuses to our employees including the NEOs. Mr. Sharp's employment terminated in April 2007 and he was not awarded a bonus for 2007. The following is a summary of the annual target bonus and the actual bonus paid, stated as a percentage of base pay, granted to each NEO:

	Target Bonus (% of base salary)	Actual Bonus Paid After Adjustments (% of base salary)
Dr. Stylli	50%	40%
Mr. Hawran*	30%	18%
Dr. Cantor	25%	20%
Dr. Dragon	25%	16%
Mr. Owings*	25%	18.8%

* Actual bonus amount paid was prorated based on employment start date.

For 2007, our Compensation Committee authorized the bonus awards for NEOs to be allocated between cash and restricted stock or restricted stock units (RSUs) (with a one year cliff vesting period for restricted stock and a 13 month vesting period for RSUs) in the following proportions: Chief Executive Officer—50% cash and 50% restricted stock units; all other NEOs—60% cash and 40% restricted stock or restricted stock units. The Compensation Committee decided to pay part of the annual bonus in restricted stock or RSUs to preserve some of the Company's cash and for the inherent retention value of restricted stock and RSUs due to their vesting provision. The Committee chose to award RSUs instead of restricted stock to those NEOs that were participating in the Company's deferred compensation plan. The restricted stock or RSU portion of the bonus was awarded in January 2008, and the cash portion of the bonus was paid in February 2008. The annual bonus payments to Mr. Hawran and Mr. Owings were pro-rated because they began employment with the Company in April and January 2008 respectively. Amounts realized in a prior year from annual bonuses or equity awards are not a factor in determining current year bonus targets. We have not yet adopted a policy regarding the repayment of annual bonus amounts by the NEOs in the event that a restatement of our financial statements adversely impacts us or a performance measure upon which an annual bonus payment is based is adjusted in a manner that would have reduced the size of the bonus award, however the Compensation Committee has the discretion to consider such a policy.

Equity Grants

Other than awards of restricted stock or RSUs as part of the annual bonus awards (as discussed in the Annual Bonus section above which were awarded in January 2008), and other than Dr. Stylli's RSU award granted in October 2007, our equity grants during 2007 were in the form of Incentive Stock Options (ISOs), which are designed to qualify under Internal Revenue Code Section 422, and to the extent that those grants exceed the ISO limitations, non-qualified stock options were granted. All of the options granted in 2007 were valued at fair market value as of the date of grant. The stock option grants to all NEOs, except to Mr. Owings, vest on a monthly basis over four years; Mr. Owings' grant was part of his offer and acceptance of employment, and vests 25% after one year from the grant date (his employment start date) and the remaining 75% vests on a monthly basis after that time for the next 36 months. In connection with and in acknowledgement of Dr. Stylli's performance beginning with the Company's financing and recapitalization that occurred in June 2006 and continued performance through mid 2007, in October 2007 the Compensation Committee granted Dr. Stylli a RSU award of 50,000 shares, initially unvested with 13/48 of the shares vesting 13 months after the grant date and the remaining balance of shares vesting in a series of 35 successive equal monthly installments, and a stock option award for the purchase of 125,000 shares of common stock, vesting monthly over 48 months. In October 2007, the Compensation Committee also determined that, in its sole discretion, it would consider in mid-2008 similar equity awards for Dr. Stylli following review of his performance for the remainder of 2007 and through mid-2008.

The external compensation consultant reported to the Compensation Committee benchmarking survey market data (see the sources above under base pay) for annual stock option grants for the NEOs and other executives. The Chief Executive Officer provided input to the Committee on recommended annual stock option grants for the NEOs who reported to him. The Committee considered the information from the consultant and from our Chief Executive Officer, and stock option grants to the NEOs and other executives were established and approved by our Compensation Committee. The stock option grant awards are determined by the industry data as described above, the value of the particular NEO to our Company as a whole and to our Company's key business initiatives, the individual performance of the individual and the individual's contribution to Company goals. The 50th to 75th percentile range was chosen by the Compensation Committee as a desirable target range (prior to adjustment for performance considerations) for stock option grants. The Committee believes that a higher benchmark target range (50th to 75th percentile) for stock option grants as compared to the target of 50th percentile for base salary and annual bonus is an extra incentive, without using the Company's cash, for retention and to increase alignment of the interests of management with those of our stockholders with the goal of creating long term growth and value for the Company. On average, the Committee established and approved equity grants that were at the mid to low end of the target range. The Compensation Committee reviewed and approved the

proposed grants for the NEOs and also approved a grant for our Chief Executive Officer. Amounts realized in a prior year from annual bonuses or equity awards are not a factor in determining current year equity awards.

We do not time the granting of our options with any favorable or unfavorable news relating to the Company. Proximity of any awards to an earnings announcement, market event or other event related to us is purely coincidental.

We do not currently maintain stock ownership guidelines for NEOs, other executives, or Board members. We do maintain an insider trading policy that, in addition to prohibiting trading during closed window periods, prohibits such individuals from short selling our stock, and although currently we do not prohibit the use of hedging instruments, we require that such individuals inform us of their use and we reserve the right to restrict or prohibit such use. During 2007, the use of a hedging instrument was not reported to us. Additionally, our Code of Business Conduct and Ethics prohibits employees from engaging in any transaction in which an employee would derive an economic benefit as a result of a decline in our stock price.

Other Compensation

Dr. Stylli, our Chief Executive Officer receives an additional term life and disability insurance benefit as provided under his employment agreement, and Dr. Stylli, Mr. Hawran and Dr. Cantor each receive an additional medical expense reimbursement benefit. Mr. Owings received a relocation expense reimbursement benefit and related tax gross-up benefit in connection with his hiring in 2007. All of the NEOs receive life and disability insurance benefits under the programs that are available to all employees. The additional compensation discussed under this section is shown in column I of the Summary Compensation Table.

Change in Control Severance Benefit Plan

In October 2007, the Compensation Committee approved the Change in Control Severance Benefit Plan (the "Change in Control Plan") to provide severance benefits to designated officers, including all of the NEOs except for Mr. Sharp whose employment terminated in April, 2007, following termination of employment in connection with a change in control transaction. The Change in Control Plan supersedes our prior Change in Control Severance Benefit Plan which expired in July 2007 and supersedes any similar plan, policy, or practice applicable to any participant.

We adopted our Change in Control Plan in order to preserve employee morale and productivity and encourage retention in the face of the disruptive impact of an actual or rumored change in control of the company. The Change in Control Plan also allows us to provide a standard set of severance benefits to new and existing employees and avoids negotiation of "one-off" arrangements with individual executive officers or employees. In addition, the program is intended to align the interests of our executive officers with those of our stockholders by enabling our executive officers to consider corporate transactions that are in the best interests of the stockholders and other constituents of the company without undue concern over whether the transactions may jeopardize their own employment. It is also important to note that the enhanced change in control benefits under our Change in Control Plan are subject to a "double trigger," which means that an executive officer will only receive severance benefits if there is a change in control as well as a loss of his or her employment. This differs from a "single trigger" program that would provide severance benefits immediately upon a change in control. This is consistent with the purpose of the program, which is to provide employees with a guaranteed level of financial protection only upon loss of employment.

The Change in Control Plan provides that following a covered termination, participants continue to receive, for a specified period based on the participant's assigned category of benefit or tier, salary continuation benefits, bonus payments, vesting acceleration and health insurance and other benefits. The Plan was created and the benefits determined in consultation with the external compensation consultant based on peer group benchmarking, and with input from our Chief Executive Officer. Each participant is assigned by the

Compensation Committee to one of three tiers, based upon several factors including the participant's title, role, and responsibility. The tier selection for each participant was determined by the Compensation Committee with input from our Chief Executive Officer and input from the external compensation consultant. The Committee's philosophy in establishing the three tiers of benefits was to provide change in control benefits to a broader group of executives than might be typical but to reduce the total amount of benefits payable under the plan, if triggered, by reducing the benefits incrementally for tier two and tier three participants and by designating a greater number of participants to tier three and tier two status. Benefits and payments under the Plan are discussed in the "Post-Employment Payments" section below.

Policy Regarding Tax Deductibility of Executive Compensation

We do not currently have a policy regarding the limitation of executive pay to amounts that would be deductible under Internal Revenue Code Section 162(m). However, we believe it is in our best interest, to the extent practical, to have executive officer compensation be fully deductible under Internal Revenue Code Section 162(m). Section 162(m) of the Code generally provides that publicly-held companies may not deduct compensation paid to certain of its top executive officers to the extent that such compensation exceeds $1 million per officer in a calendar year. Compensation that is "performance-based" compensation within the meaning of the Code does not count toward the $1 million limit.

We have taken steps to ensure that payments to executive officers under equity compensation programs meet the Section 162(m) requirements, where feasible. The Compensation Committee retains the discretion to pay compensation that potentially may not be fully deductible to reward performance and/or enhance retention. Stock options and other equity awards granted under our 2006 Equity Incentive Plan meet the requirement of Section 162(m). Executive pay at Sequenom has historically met the annual compensation limit of Section 162(m), and our CEO's compensation was within the $1 million limit in 2007.

Deferred Compensation Plan

In April 2007, the Compensation Committee recommended to our Board of Directors and our Board of Directors approved a Deferred Compensation Plan that will allow eligible executives, including our NEOs, to defer receipt of their salary and cash bonus, and directors to defer their cash retainer and meeting fees, into bookkeeping accounts that permit the participants to select from a range of phantom investment alternatives that mirror the gains and losses of several different investment alternatives, including our common stock. Under the terms of the plan, participants will be permitted to defer up to 100% of their annual salary, bonus or director fees until a specified date, termination of service or a specified year following termination of service, as elected by the participant at the time of deferral. Additionally, under the terms of the plan, participants will be permitted to defer restricted stock unit awards granted under our equity incentive plan. We are not required to make any contributions to the plan. We funded the expenses incurred in creating the plan and fund the expenses for administering the plan. Participants have our unsecured contractual commitment to pay the amount due under the plan, which remains subject to the claims of our general creditors.

Employment Agreements

Although it is not our policy or routine practice to enter into written employment agreements with executive officers, employment agreements or countersigned written offer letters are used from time to time on a case by case basis, to attract and/or to retain executives. We currently maintain written employment agreements with two of our NEOs, Harry Stylli, Ph.D., President and Chief Executive Officer, and Charles Cantor, Ph.D., Chief Scientific Officer, and we maintain countersigned written offer letters for Paul Hawran, Chief Financial Officer, Elizabeth Dragon, Ph.D., Senior Vice President Research and Development, and Steve Owings, Vice President Commercial Development, Prenatal Diagnostics.

Summary Compensation Table

The following table provides information regarding the compensation earned by our NEOs during the fiscal year ended December 31, 2007.

Name and Principal Position	Year	Salary ($)	Stock Awards ($)	Option Awards ($)(4)	Non-Equity Incentive Plan Compensation ($)(5)	All Other Compensation ($)	Total ($)
Harry Stylli, Ph.D. ..... Chief Executive Officer	2007	430,500	552,000(6)	914,994	176,400(7)	15,967(12)	2,089,861
John Sharp (1) ..... Former Principal Financial Officer	2007	55,456	0	27,851	0	13,226(13)	96,533
Paul Hawran (2) ..... Chief Financial Officer	2007	225,000	0	174,340	54,247(8)	46,888(14)	500,475
Charles Cantor, Ph.D. ..... Chief Scientific Officer	2007	308,160	0	84,547	62,400(9)	6,858(15)	461,965
Elizabeth Dragon, Ph.D. ..... Senior Vice President, R & D	2007	270,967	0	75,917	44,001(10)	1,904(16)	392,789
Steve Owings (3) ..... Vice President – Commercial Development Prenatal Diagnostics	2007	213,173	0	104,679	33,830(11)	89,789(17)	441,471

(1) Mr. Sharp terminated his employment effective April 17, 2007.

(2) Mr. Hawran's employment began April 1, 2007.

(3) Mr. Owings' employment began January 22, 2007.

(4) The amounts in this column reflect the dollar amount recognized for financial reporting purposes for the fiscal year ended December 31, 2007, in accordance with FAS 123(R), without consideration of forfeitures. The method and assumptions used to calculate the value of the stock option awards are discussed in note 2 to our financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2007 filed with the Securities and Exchange Commission on March 17, 2008.

(5) Represents total value of bonus awards, comprising a combination of cash awards and restricted stock or restricted stock unit grants for each individual, awarded in February 2008 for fiscal year 2007 performance, and as discussed under the Compensation Discussion and Analysis section above.

(6) Represents 50,000 common shares of restricted stock units granted to Dr. Stylli at a fair market value of $11.04 per share on the date of grant.

(7) Dr. Stylli received an $82,000 cash payment and 10,808 shares of restricted stock units having a fair market value of $8.16 per share on the date of grant.

(8) Mr. Hawran received a $32,548 cash payment and 2,659 shares of restricted stock units having a fair market value of $8.16 per share on the date of grant.

(9) Dr. Cantor received a $37,440 cash payment and 3,058 shares of restricted stock units having a fair market value of $8.16 per share on the date of grant.

(10) Dr. Dragon received a $26,401 cash payment and 2,156 shares of restricted stock having a fair market value of $8.16 per share on the date of grant.

(11) Mr. Owings received a $20,298 cash payment and 1,658 shares of restricted stock having a fair market value of $8.16 per share on the date of grant.

(12) Medical Expense Reimbursement, Life, and Disability Insurance.

(13) Payment for unused vacation days upon employment severance, Life and Disability Insurance.

(14) Consulting fees prior to employment date, Medical Expense Reimbursement, Life, and Disability Insurance.
(15) Medical Expense Reimbursement, Life and Disability Insurance.
(16) Life and Disability Insurance.
(17) Relocation Expense Reimbursement and related tax gross-up, and Life and Disability Insurance.

Employment Agreements

We maintain employment agreements with two of our NEOs, Dr. Stylli, and Dr. Cantor and we maintain counter-signed offer letter agreements with Mr. Hawran, Dr. Dragon, and Mr. Owings. The following is a summary of the key terms of those agreements:

Dr. Stylli's Agreement

In May 2005, we entered into an employment agreement with Dr. Stylli that provided for the employment of Dr. Stylli on an at-will basis commencing June 6, 2005. Pursuant to his employment agreement, Dr. Stylli is eligible for an annual performance bonus of up to 50% of his annual base salary. Dr. Stylli's employment agreement also provides for the grant of an inducement stock option to purchase 333,333 shares of our common stock at an exercise price of $3.30 per share, the fair market value of our common stock on his start date. These stock options are governed by our 1999 Stock Incentive Plan. The agreement also provided for a contingent stock option award. This stock option award to purchase an aggregate of 759,891 shares of our common stock was granted upon the closing of our private placement financing in June 2006 at an exercise price equal to the fair market value of our common stock on the closing date. These stock options are governed by our 2006 Equity Incentive Plan. Both stock option awards have a 10-year term, with the shares subject to each grant vesting in 48 equal monthly installments so long as Dr. Stylli continues to be our employee. Pursuant to his agreement, Dr. Stylli is eligible to participate in our employee benefits programs.

Dr. Stylli's employment agreement also provides for term life insurance coverage of $1 million and disability insurance providing long-term coverage of $20,000 per month, provided that the additional annual cost for such term life and disability insurance does not exceed $15,000. Dr. Stylli is entitled to certain payments in the event of the termination of his employment with us under certain circumstances; these payments are discussed in more detail in the "Post-Employment Payments" section below. Dr. Stylli's employment agreement contains change in control provisions that are no longer in effect and have been superseded by Dr. Stylli's participation in the Change in Control Plan, also discussed in the "Post Employment Payments" section below.

Mr. Hawran's Agreement

On February 14, 2007, we and Mr. Hawran entered into a letter agreement pursuant to which Mr. Hawran served as a consultant to us from February 15, 2007 through March 31, 2007 and continues to serve as Chief Financial Officer on an at-will basis commencing April 1, 2007. Under the agreement Mr. Hawran received a consulting fee of $25,000 per month and was granted pursuant to our 2006 Equity Incentive Plan two stock options, each with an exercise price equal to $4.66 per share, the fair market value of our common stock on February 15, 2007. The first is an option to purchase 135,000 shares of our common stock, vesting over four years, 25% on February 15, 2008 and the balance in 36 equal monthly installments thereafter. The second is an option to purchase 25,000 shares our common stock, exercisable on the achievement of specific performance milestones.

As our Chief Financial Officer, under the agreement Mr. Hawran will be eligible for an annual cash bonus of up to 30% of his annual base salary, subject to the achievement of significant measurable goals that are subject to approval and modification by the compensation committee of our board of directors. Mr. Hawran also receives other benefits generally provided to our executive employees.

Dr. Cantor's Agreement

Effective September 15, 2005, Dr. Cantor's amended employment agreement provides for employment on an at-will basis. Dr. Cantor is entitled to certain payments in the event of the termination of his employment with us; these payments are discussed in more detail in the "Post-Employment Payments" section below. Dr. Cantor's employment agreement also provides that all of Dr. Cantor's stock options will become fully vested if and upon a majority of the outstanding shares of our common stock or all or substantially all of our assets are acquired by another business or by an individual, however such provision has been superseded by Dr. Cantor's participation in the Change in Control Plan, also discussed in the "Post-Employment Payments" section below.

Dr. Dragon's Agreement

In April 2006 we entered into a letter agreement with Dr. Dragon which provided for the employment of Dr. Dragon as Senior Vice President of Research and Development on an at-will basis commencing on May 15, 2006, with eligibility for an annual performance bonus of up to 25% of her annual base salary. Dr. Dragon's agreement also provided for relocation assistance of up to a maximum of $70,000. The relocation assistance payment is subject to repayment to us by Dr. Dragon on a prorata basis in the event that she resigns prior to serving at least 24 months. Under the agreement Dr. Dragon was also granted, pursuant to our 1999 Stock Incentive Plan, a stock option to purchase 91,666 shares of our common stock at an exercise price equal to $1.83 per share, the fair market value of our common stock on her start date, May 15, 2006. The stock option vests over four years, 25% on May 15, 2007 and the balance in 36 equal monthly installments thereafter, and has a 10-year term, with vesting occurring so long as Dr. Dragon continues to be our employee. Pursuant to the agreement, Dr. Dragon is eligible to participate in our employee benefits programs.

Mr. Owings' Agreement

In December 2006 we entered into a letter agreement with Mr. Owings, amended in January 2007, which provided for the employment of Mr. Owings on an at-will basis commencing in January 2007 with eligibility for an annual performance bonus of up to 25% of his annual base salary. Mr. Owings' agreement also provided for a sign-on bonus of $10,000 and relocation assistance of up to a maximum of $80,000, including tax gross up for up to $30,000 of the relocation assistance. The sign-on bonus and relocation assistance payments are subject to repayment to us by Mr. Owings on a prorata basis in the event that he resigns or is terminated for cause prior to serving at least 12 months with respect to the sign-on bonus, and prior to serving at least 24 months with respect to the relocation assistance. Under the agreement Mr. Owings was also granted, pursuant to our 2006 Equity Incentive Plan, three stock options, each with an exercise price equal to $4.33 per share, the fair market value of our common stock on his start date, January 22, 2007. The first is an option to purchase 75,000 shares of our common stock, vesting over four years, 25% on January 22, 2008 and the balance in 36 equal monthly installments thereafter. The second is an option to purchase 7,500 shares of our common stock, exercisable on the achievement of a specific performance milestone related to 2007 prenatal test sales revenue, with 50% vesting upon completion of the milestone and 50% vesting in December 2008. The third is an option to purchase 17,500 shares of our common stock, exercisable on the achievement of a specific performance milestone related to 2008 prenatal test sales revenue with 50% vesting upon completion of the milestone and 50% vesting in December 2009. The stock option awards have a 10-year term, with vesting occurring so long as Mr. Owings continues to be our employee. Pursuant to the agreement, Mr. Owings is eligible to participate in our employee benefits programs.

Post-Employment Payments

We currently provide post-employment payments to our NEOs in certain limited circumstances. Post-employment payments to our Chief Executive Officer, Dr. Stylli, and our Chief Scientific Officer, Dr. Cantor, under circumstances unrelated to a change in control are provided entirely through their respective employment

agreements. Mr. Hawran, our Chief Financial Officer, Dr. Dragon, our Senior Vice President of Research and Development, and Mr. Owings, our Vice-President of Commercial Development Prenatal Diagnostics, do not have agreements providing for post-employment payment under circumstances unrelated to a change in control. Mr. Sharp, our former Principal Financial Officer, did not have an employment agreement and did not receive any post-employment payment in connection with his departure in April 2007. Payments to all of the NEOs that are made in connection with a change in control are made entirely through their participation in the Change in Control Plan.

Post-Employment Payment Discussion

All of the agreements referenced above have the following common elements:

- No payments are made if there is a termination for cause.
- No payments are made as a result of retirement, death or disability.
- For Dr. Stylli and Dr. Cantor, the total of any payments that would be subject to the 'golden parachute excise tax' under Internal Revenue Code Section 280G are limited to the amount that would result in no excise tax being imposed (or, if greater, an amount in which the executive receives a net after-tax payment if the excise tax is assessed).

Payments under employment agreements that are not related to a change in control:

Dr. Stylli. If Dr. Stylli's employment is terminated (i) without cause (as defined in his employment agreement) by us at any time or (ii) for good reason (as defined in his employment agreement) by Dr. Stylli, then Dr. Stylli is entitled to (1) base salary continuation for 12 months following the date of termination; (2) payments equal to 50% of his then current bonus eligibility amount, paid in equal monthly installments during the 12-month period he is entitled to base salary continuation; (3) continued health benefits for 12 months following the date of termination or until an earlier date that Dr. Stylli obtains new employment that provides comparable benefits; and (4) accelerated vesting of all stock options and other equity awards issued by us for a period of 12 months following the date of his termination.

Dr. Cantor. Payments are only made in the event of a termination without cause. If Dr. Cantor's employment is terminated by us without cause (as defined in his employment agreement), then Dr. Cantor is entitled to receive severance benefits from us in the form of continuation of his base salary then in effect in periodic payments, and reimbursement of health insurance premiums for he and his family, to the same extent we provided during his employment by us, for a period commencing on the effective date of his termination and ending on the earlier of his commencement of employment with another employer or six months following the date of his termination. Dr. Cantor will be available to provide consulting services to us for up to ten hours per month during the period he is receiving severance benefits from us.

Payments under employment contracts that are related to a change in control:

None of the NEOs receive payments under their employment or letter agreements in connection with a change in control. To the extent that Dr. Stylli and Dr. Cantor have such provisions in their employment agreements, such provisions have been superseded by their participation in the Change in Control Plan.

Payments under the Change in Control Plan:

In October 2007, the Compensation Committee approved the Change in Control Severance Benefit Plan (the "Change in Control Plan") to provide severance benefits to designated officers, including all of the NEOs except for Mr. Sharp whose employment terminated in April 2007, following termination of employment in connection with a change in control transaction. The Change in Control Plan supersedes our prior Change in Control Severance Benefit Plan whose benefits expired in July 2007 and supersedes any similar plan, policy, or practice applicable to any participant.

The Change in Control Plan provides that following a covered termination, participants continue to receive, for a specified period based on the participants assigned category of benefit or tier, salary continuation benefits, bonus payments, vesting acceleration and health insurance and other benefits. Each participant is assigned by the Compensation Committee to one of three tiers.

Tier I. So far, only Dr. Stylli has been assigned to Tier I. As a Tier I participant, Dr. Stylli is entitled to receive salary continuation payments in an amount equal to his base salary payable for 24 months following termination, subject to a reduction during the last six months of such period for any salary he receives from other full-time employment during the 24 months following termination. Dr. Stylli is also entitled to receive a single lump-sum payment equal to 1.5 times his target bonus amount and all unvested equity awards held by him will vest immediately upon termination. We will also pay premiums for continuation of health plan coverage for 18 months following termination.

Tier II. Mr. Hawran, Dr. Cantor, and Dr. Dragon have been assigned to Tier II. Participants who have been assigned to Tier II are entitled to receive salary continuation payments in an amount equal to the participant's base salary payable for 12 months following termination. Tier II participants are entitled to receive a single lump-sum payment equal to such participant's target bonus amount and all of the participant's equity awards that utilize time-based vesting will immediately vest as to the next 24 months of vesting installments upon termination. We will also pay premiums for continuation of health plan coverage for 12 months following termination.

Tier III. Mr. Owings has been assigned to Tier III. Participants who have been assigned to Tier III are entitled to receive salary continuation payments in an amount equal to the participant's base salary payable for 12 months following termination. Tier III participants are entitled to have all equity awards that utilize time-based vesting will immediately vest as to the next 12 months of vesting installments upon termination. We will also pay premiums for continuation of health plan coverage for 12 months following termination.

Potential Post-Employment Payments

The table below sets forth potential payments to our NEOs upon termination of employment or upon termination of employment in connection with a change in control. The table reflects amounts payable to our NEOs assuming their employment was terminated on December 31, 2007. The value of equity awards was determined using the intrinsic value (market value less exercise price) of unvested equity awards as of December 31, 2007 that would become vested as a result of such termination. The market value of our common stock used for such calculations was the closing price of our common stock on December 31, 2007 of $9.55 per share.

Name	Upon termination without Cause (1)	Upon Termination under Specified Circumstance Following a Change in Control (2)
Harry Stylli, Ph.D. ..... Principal Executive Officer	$3,683,587	$8,522,556
Paul Hawran ..... Chief Financial Officer	0	$ 755,363
Charles Cantor, Ph.D. ..... Chief Scientific Officer	$ 156,000	$ 547,792
Elizabeth Dragon, Ph.D. ..... Senior Vice President, R & D	0	$ 530,565
Steve Owings ..... Vice President Commercial Development Prenatal Diagnostics	0	$ 330,109

(1) Also includes, solely in the case of Dr. Stylli, his resignation for "good reason" pursuant to his employment agreement. Amounts include severance payments, any bonus amounts payable (solely in the case of Dr. Stylli), the value of any incremental benefits and the intrinsic value of equity awards that would become vested as a result of such termination. In the case of Dr. Cantor, the amount assumes that he did not secure new employment until all severance payments are made under his employment agreement. Severance amounts and benefits would be paid on a monthly basis over 12 months for Dr. Stylli and over 6 months for Dr. Cantor.

(2) In the case of Dr. Stylli, the amount assumes that Dr. Stylli does not receive salary from other full-time employment during the 24 months following termination.

Grants of Plan-Based Awards

The following table shows for the fiscal year ended December 31, 2007, certain information regarding grants of plan-based awards to the NEOs.

Name	Grant Date	Approval Date (1)	All Other Option Awards; Number of Shares of Stock or Units (#)	Exercise or Base Price of Option Awards ($/sh)	Grant Date Fair Value of Stock and Option Awards ($)
Harry Stylli, Ph.D.	1/18/07	1/18/07	163,718	$ 4.60(2)	$568,969
Chief Executive Officer	1/18/07	1/18/07	3,483	$ 4.60(3)	$ 12,104
	1/18/07	1/18/07	22,807(6)	$ 4.60	$ 79,261
	10/18/07	10/18/07	117,395	$11.04(2)	$958,741
	10/18/07	10/18/07	7,605	$11.04(3)	$ 62,109
	10/18/07	10/18/07	50,000(8)	$11.04	$408,340
John Sharp	1/18/07	1/18/07	3,219(6)(7)	$ 4.60	$ 11,187
Former Principal Financial Officer					
Paul Hawran	2/15/07	2/15/07	135,000	$ 4.66(3)	$474,876
Chief Financial Officer	2/15/07	2/15/07	25,000	$ 4.66(3)	$ 87,940
Charles Cantor, Ph.D.	1/18/07	1/18/07	6,444(6)	$ 4.60	$ 22,395
Chief Scientific Officer	7/10/07	7/10/07	5,238	$ 4.93(2)	$ 19,262
	7/10/07	7/10/07	54,762	$ 4.93(3)	$201,381
Elizabeth Dragon, Ph.D.	1/18/07	1/18/07	2,891(6)	$ 4.60	$ 10,047
Senior Vice President, R & D	7/10/07	7/10/07	6,446	$ 4.93(2)	$ 23,705
	7/10/07	7/10/07	53,554	$ 4.93(3)	$196,939
Steve Owings	1/22/07	1/22/07	12,844	$ 4.33(4)	$ 41,981
Vice President, Commercial	1/22/07	1/22/07	62,156	$ 4.33(5)	$203,157
Development Prenatal Diagnostics	1/22/07	1/22/07	7,500	$ 4.33(4)	$ 24,514
	1/22/07	1/22/07	13,156	$ 4.33(4)	$ 43,000
	1/22/07	1/22/07	4,344	$ 4.33(5)	$ 14,198

(1) This column reflects the date that the Board of Directors or the Compensation Committee took, as applicable, action to approve the stock option grant.
(2) Non-qualified stock option granted under 2006 Equity Incentive Plan.
(3) Incentive stock option granted under 2006 Equity Incentive Plan.
(4) New hire grant, non-qualified stock option granted under 2006 Equity Incentive Plan.
(5) New hire grant, incentive stock option granted under 2006 Equity Incentive Plan.
(6) Restricted common stock grant, granted under 2006 Equity Incentive Plan, vests one year from date of grant.
(7) Mr. Sharp's employment terminated in April 2007 and the restricted common stock grant terminated unvested.
(8) Restricted common stock unit grant, granted under 2006 Equity Incentive Plan, vests 13/48 thirteen months after the date of grant and the remainder vests equally over the following 35 months.

Outstanding Equity Awards at December 31, 2007

The following table sets forth certain information regarding outstanding equity awards for the NEOs for the fiscal year ended December 31, 2007.

	Option Awards				Stock Awards	
Name	Number of Securities Underlying Unexercised Options— Exercisable (#)	Number of Securities Underlying Unexercised Options— Unexercisable (#)	Option Exercise Price ($)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested ($)
Harry Stylli, Ph.D.	5,208	112,187(1)	$11.04	10/18/2017	22,807(2)	$217,807
Chief Executive Officer	0	7,605	$11.04	10/18/2017	50,000(3)	$477,500
	38,317	125,401(1)	$ 4.60	1/18/2017		
	0	3,483(1)	$ 4.60	1/18/2017		
	107,659(1)	196,319(1)	$ 1.72	7/10/2016		
	284,959(1)	421,457(1)	$ 1.87	6/6/2016		
	0	53,475	$ 1.87	6/6/2016		
	147,728(1)	64,393(1)	$ 3.30	6/6/2015		
	60,606	60,606	$ 3.30	6/6/2015		
John Sharp	0	0	—	—	0	0
Former Principal Financial Officer						
Paul Hawran	0	135,000(1)	$ 4.66	2/15/2017	0	0
Chief Financial Officer	0	10,000(1)	$ 4.66	2/15/2017		
	0	5,000(1)	$ 4.66	2/15/2017		
	0	10,000(1)	$ 4.66	2/15/2017		
	13,334(1)	26,666(1)	$ 2.08	8/21/2016		
Charles Cantor, Ph.D.	0	5,238(1)	$ 4.93	7/10/2017	6,444(2)	$61,540
Chief Scientific Officer	6,250	48,512	$ 4.93	7/10/2017		
	10,415(1)	0	$ 1.87	6/6/2016		
	20,835	52,083	$ 1.87	6/6/2016		
	17,755(1)	0	$ 8.76	10/24/2013		
	45,578	0	$ 8.76	10/24/2013		
	33,333(1)	0	$10.59	6/28/2012		
	6,666(1)	0	$14.67	5/31/2012		
	15,000(1)	0	$14.67	5/31/2012		
	16,666(1)	0	$14.67	5/31/2012		
Elizabeth Dragon, Ph.D.	0	6,446(1)	$ 4.93	7/10/2017	2,891(2)	$27,609
Senior Vice President, R & D	6,250	47,304	$ 4.93	7/10/2017		
	36,285	55,381	$ 1.83	5/15/2016		
Steve Owings	0	62,156	$ 4.33	1/22/2017	0	0
Vice President, Commercial	0	12,844(1)	$ 4.33	1/22/2017		
Development Prenatal Diagnostics	0	7,500(1)	$ 4.33	1/22/2017		
	0	4,344	$ 4.33	1/22/2017		
	0	13,156(1)	$ 4.33	1/22/2017		

(1) Non-qualified options.

(2) Restricted common stock grant vested on January 18, 2008, one year from the date of grant.

(3) Restricted common stock units granted on October 18, 2007, vesting over four years with 13/48th vesting 13 months after the grant date, then equal monthly installments thereafter.

Option Exercises and Stock Vested

None of the NEOs exercised any stock options and none of their restricted stock or restricted stock unit awards vested during the fiscal year ended December 31, 2007.

Option Repricings

We have not engaged in any option repricings or other modifications to any of our outstanding equity awards during the year ended December 31, 2007.

Pension Benefits

We do not have or sponsor any pension plans.

Nonqualified Deferred Compensation

The following table sets forth certain information for 2007 regarding the NEOs and our nonqualified deferred compensation plan.

Name	Executive Contributions in 2007 ($)	Registrant Contributions in 2007 ($)	Aggregate Earnings in 2007 ($)	Aggregate Withdrawals/ Distributions ($)	Aggregate Balance at December 31, 2007 ($)
Harry Stylli, Ph.D., ... Chief Executive Officer	552,000(1)	0	(74,500)	0	477,500

(1) This amount is also reported in the Stock Awards column of the Summary Compensation Table.

During 2007, none of our NEOs except for Dr. Stylli participated in and had account balances in our Deferred Compensation Plan (the "Plan"). Dr. Stylli contributed to the Plan RSUs covering 50,000 shares of common stock granted at a fair market value of $11.04 per share. At December 31, 2007 the fair market value of our common stock was $9.55 per share, and the RSUs were 100% unvested.

On April 18, 2007, our Board of Directors approved the Plan. The Plan is intended to comply with the requirements of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code"). The Plan is intended to be an unfunded "top hat" plan which is maintained primarily to provide deferred compensation benefits for our directors and a select group of our "management or highly compensated employees" within the meaning of Sections 201, 301, and 401 of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), and to therefore be exempt from the provisions of Parts 2, 3, and 4 of Title I of ERISA. The Plan is intended to help build a supplemental source of savings and retirement income through pre-tax deferrals of eligible compensation, which may include cash director fees, base salary, cash bonus awards, stock unit awards, discretionary cash awards and any other payments designated by the Plan committee as eligible for deferral under the Plan from time to time.

Unless otherwise determined by the Plan committee, directors and employees at the vice president level or above, including our executive officers, who are notified regarding their eligibility to participate and deliver the Plan enrollment materials are eligible to participate in the Plan ("Participants"). Under the Plan, we will provide Participants with the opportunity to make annual elections to defer a specified percentage of up to 100% of their eligible compensation. Elective deferrals of cash compensation are withheld from a Participant's paycheck and credited to a bookkeeping account established in the name of the Participant. The Participant is always 100%

vested in his or her own elective cash deferrals and any earnings thereon. Elective deferrals of stock unit awards are credited to a bookkeeping account established in the name of the Participant with respect to an equivalent number of shares of our common stock, and such credited shares are subject to the same vesting conditions as are applicable to the stock unit award. We may also make discretionary contributions to Participants' accounts in the future although we do not currently do so. Any discretionary contributions made by us in the future will be subject to such vesting arrangements as we may determine.

Amounts contributed to a Participant's account through elective deferrals of cash compensation or through our discretionary contributions are generally not subject to income tax, and we do not receive a deduction, until they are distributed pursuant to the Plan. However, cash deferrals are subject to the Federal Insurance Contributions Act tax imposed under Section 3101 and 3121(v)(2) of the Code at the time of deferral (the "FICA tax"). Deferrals of stock unit awards are subject to the FICA tax at the time the stock unit awards vest, but are not subject to income tax, and we do not receive a deduction, until shares of our common stock are distributed pursuant to the Plan.

At the time of deferral, with respect to the allocation of amounts credited to their bookkeeping accounts, Participants may select from a range of phantom investment alternatives that mirror the gains or losses of several different investment funds, including our common stock. Deferrals of stock unit awards under the Plan are automatically allocated to our common stock fund and may not be allocated to any other fund. Any portion of the bookkeeping account initially allocated to our common stock fund may not be changed to another fund, and any portion of the account balance previously allocated to an investment fund may not be changed to our common stock fund.

Under the Plan, we will be obligated to deliver on a future date deferred compensation credited to the Participant's account, adjusted for any positive or negative investment results from the phantom investment alternatives selected by the Participant under the Plan (each, an "Obligation" and collectively, the "Obligations"). The Obligations are unfunded, unsecured general obligations of us and rank in parity with other unsecured and unsubordinated indebtedness of us, subject to the claims of our general creditors. The Obligations are not transferable except upon death of the Participant.

With respect to the portion of the bookkeeping account allocated to an investment fund other than our common stock fund, each Obligation will be payable in cash, commencing upon a distribution date selected by the Participant at the time of deferral. The portion of the bookkeeping account allocated to our common stock fund will be payable in shares of our common stock, commencing upon a distribution date selected by the Participant at the time of deferral.

Payments will be distributed in the form of a lump sum payment or in up to ten annual installments upon either termination of service or a selected specified distribution date or dates, depending upon the election made by the Participant at the time of deferral. If a Participant's service with us terminates prior to the selected specified distribution date or dates, payments will commence in connection with the termination of service. Payments triggered upon termination of service will generally commence at termination of service. Payment triggered upon termination of service may also commence in a specified year up to five years following the date of termination of service in accordance with the Participant's deferral election if the Participant has completed at least five years of service with us at the time of termination. If a Participant's service terminates with us due to disability or the Participant is receiving installment payments and becomes disabled prior to payment of all the installments, the Obligation will become immediately payable. If the Participant's service terminates with us due to Participant's death or the Participant is receiving installment payments and dies prior to payment of all the installments, the Obligation will either continue to be paid in accordance with the payment schedule that applied prior to the Participant's death or will become immediately payable if so specified in accordance with the Participant's deferral election. Any payments made to specified employees that commence upon a separation from service will be delayed six months in accordance with the requirements of Section 409A of the Code. Participants may be entitled to receive payments through certain unforeseeable emergency withdrawals.

Payments scheduled to be made under the Plan may be otherwise delayed or accelerated only upon the occurrence of certain specified events that comply with the requirements of Section 409A of the Code.

A committee appointed by our Board of Directors administers the Plan. We can amend or terminate the Plan at any time, but no such action shall unilaterally reduce a Participant's account balance without his or her consent prior to the date of such action. We may adopt any amendments to the Plan that we deem necessary or appropriate to preserve the intended tax treatment of the Plan benefits or to otherwise comply with the requirements of Section 409A of the Code and related guidance.

Board of Director Compensation

The following table sets forth in summary form information concerning the compensation that we paid during the fiscal year ended December 31, 2007 to each of our non-employee directors:

Name	Fees Earned or Paid in Cash ($)	Option Awards ($)(8)	Total ($)
Harry Stylli, Ph.D.(1)	—	—	—
Charles Cantor, Ph.D.(1)	—	—	—
Paul Hawran(2)	7,500	0	7,500
Harry F. Hixson, Jr., Ph.D.	57,000	115,783	172,783
Ernst-Günter Afting, Ph.D., M.D.	33,500	110,562	144,062
Patrick Enright(3)	19,750	77,513	97,263
Larry E. Lenig, Jr.(4)	14,500	39,808	54,308
Ronald M. Lindsay, Ph.D.	37,000	110,562	147,562
Kathleen M. Wiltsey(5)	13,500	69,694	83,194
Richard A. Lerner, M.D.(6)	12,500	66,429	78,929
John A. Fazio(7)	6,167	48,471	54,638

(1) Dr. Stylli, Chief Executive Officer, is also a director but received no additional compensation for board service. Dr. Cantor, Chief Scientific Officer, is also a director but received no additional compensation for board service. See the Summary Compensation Table for their compensation as officers.

(2) Mr. Hawran served as director until February 2007, prior to serving as a consultant to the Company and prior to his employment in April 2007.

(3) Mr. Enright served as a director until July 2007.

(4) Mr. Lenig served as a director until June 2007.

(5) Ms. Wiltsey served as a director beginning in June 2007.

(6) Dr. Lerner served as a director beginning in July 2007.

(7) Mr. Fazio served as a director beginning in October 2007.

(8) The amounts in this column reflect the dollar amount recognized for financial reporting purposes for the fiscal year ended December 31, 2007, in accordance with FAS 123(R), without consideration of forfeitures. The method and assumptions used to calculate the value of the stock option awards are discussed in note 2 to our financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2007 filed with the Securities and Exchange Commission on March 17, 2008.

We currently provide fees to our outside, independent directors for their service on our Board of Directors and on the committees of our Board. The Director compensation program consists of two parts, cash payments and equity payments which are provided in the form of stock options granted at fair market value.

Cash Payments for Board and Committee Service

The Nominating and Corporate Governance Committee oversees director compensation and during 2007 utilized the services of an external compensation consultant who provided the Committee with an analysis of board of director pay programs across comparable companies, using the same benchmarking companies and data as used for our executive compensation as discussed previously under the "Executive Compensation" section. Based on the benchmarking data and information provided by the external consultant, the Nominating and Corporate Governance Committee increased the retainer amounts for the committee chairs and the chairman of the board, compared to the retainers for 2006.

Cash payments to our Directors are paid according to the following table.

Type of payment	Amount
Annual retainer for all Directors	$25,000
Additional annual retainer for the Chairman of the Board	$20,000
Additional annual retainer for the Chairman of the Audit Committee	$12,000
Additional annual retainer for the Chairman of the Compensation Committee	$ 8,000
Additional annual retainer for the Chairman of the Nominating and Corporate Governance Committee	$ 5,000
In person meeting fee for special meetings of the full Board of Directors	$ 1,500
Telephonic meeting fee for special meetings of the full Board of Directors	$ 1,000
Meeting fee for any special committee meeting, attended in person or by telephone	$ 1,000

Special committee meetings are defined as committee meetings that do not occur in conjunction with regularly scheduled Board meetings. Directors are also entitled to reimbursement for their expenses incurred in connection with attendance of our Board of Directors and Committee meetings.

Equity Grants

In 2007, based on the benchmarking data and information provided by the external consultant, the Nominating and Corporate Governance Committee increased the annual stock options grants to non-employee Directors to 20,000 shares, and increased the initial stock option grant for a newly elected non-employee Director to 40,000 shares. The options vest upon the earlier of the first anniversary of the grant date or the date of the next annual stockholder meeting. Each option grant has a ten year term.

The following table sets forth the 2007 Non-Employee Director Stock Option Grants:

Name	# Shares
Harry F. Hixson, Jr., Ph.D.	20,000
Ernst-Günter Afting, Ph.D., M.D.	20,000
Patrick G. Enright	20,000*
Ronald M. Lindsay, Ph.D.	20,000
Kathleen M. Wiltsey	40,000
Richard A. Lerner, M.D.	40,000
John A. Fazio	40,000

* As Mr. Enright's Board service terminated prior to the required date, this award terminated unvested.

Mr. Hawran resigned from the Board in February 2007 and was not granted stock options in his capacity as a Director during 2007. In view of the removal of the Company's classified board of directors and three year director terms, which occurred in 2006, the current annual election for all directors, and in view of the

Nominating and Corporate Governance Committee's review of the Company's director pay program including the benchmarking and other data provided by the external compensation consultant, the vesting schedule for the June 6, 2006 stock option grants to Drs. Afting, Hixson, and Lindsay, originally vesting 1/3 annually over three years, was amended in July 2007. The amended vesting schedule provides that the 1/3 portion of each option grant that was scheduled to vest on June 6, 2008 was immediately vested, and provided that each director continues to serve as a director until the earlier of June 6, 2008 or the date of the 2008 annual stockholders meeting, then the 1/3 portion of each option grant that was scheduled to vest on June 6, 2009, would be accelerated to the earlier of June 6, 2008 or the date of the annual stockholders meeting for 2008.

Mr. Lenig did not stand for re-election as a Director during 2007 and Mr. Enright resigned as a Director in July 2007. In connection with Mr. Lenig's and Mr. Enright's termination of their service as Directors, each of Mr. Lenig and Mr. Enright received one year accelerated vesting of the shares subject to their stock option grants awarded June 6, 2006 which originally vested 1/3 annually over three years.

CERTAIN TRANSACTIONS

Our Audit Committee is responsible for reviewing and approving or ratifying related-persons transactions. A related person is any executive officer, director, or more than 5% stockholder of the Company, including any of their immediate family members, and any entity owned or controlled by such persons.

Under our Audit Committee Charter, where a transaction has been identified as a related-person transaction, management must present information regarding the proposed related-person transaction to the Audit Committee for consideration and approval or ratification. Our Audit Committee will generally review the material facts with respect to any such transaction, the interests, direct and indirect, of the related persons, the benefits to the Company of the transaction and whether any alternative transactions were available. To identify related-person transactions in advance, the Company relies on information supplied by its executive officers, directors and certain significant stockholders. In considering related-person transactions, the Audit Committee may take into account the relevant available facts and circumstances including, but not limited to (a) the risks, costs and benefits to the Company, (b) the impact on a director's independence in the event the related person is a director, immediate family member of a director or an entity with which a director is affiliated, (c) the terms of the transaction, (d) the availability of other sources for comparable services or products and (e) the terms available to or from, as the case may be, unrelated third parties or to or from employees generally. In the event a director has an interest in the proposed transaction, the director would recuse himself from the deliberations and approval. Generally, in determining whether to approve, ratify or reject a related-person transaction, the Audit Committee would look at, in light of known circumstances, whether the transaction is in, or is not inconsistent with, the best interests of the Company and its stockholders, as the Audit Committee determines in the good faith exercise of its discretion.

Certain Related-Person Transactions

We have entered into employment agreements with certain of our officers. Please see "Employment Contracts" and "Post-Employment Payments" sections under "Executive Compensation" above.

Dr. Charles Cantor is our Chief Scientific Officer, a member of our Board of Directors and is a professor in the Department of Biomedical Engineering and Biophysics, and Co-Director of the Center for Advanced Biotechnology at Boston University. We have research agreements with Boston University in which Dr. Cantor participates under which we paid $400,000, $400,000, and $300,000, and we recorded product revenue for MassARRAY hardware and consumables, totaling $100,000, $100,000 and $100,000 in the years ended December 31, 2007, 2006 and 2005, respectively. We have also loaned Boston University a MassARRAY system for use in their research programs.

Dr. Cantor is also an adjunct professor in the department of bioengineering at the University of California, San Diego. We recorded product revenue from UCSD for MassARRAY hardware and consumables, totaling approximately $2,000, $42,000, and $126,000 in the years ended December 31, 2007, 2006, and 2005, respectively.

Dr. Richard Lerner is a member of our Board of Directors and is President of The Scripps Research Institute. For the years ended December 31, 2007, 2006, and 2005, we have recorded product revenue for MassARRAY hardware and consumables totaling approximately $318,000, $101,000, and $81,000, respectively.

We have entered into indemnity agreements with our officers and directors which provide, among other things, that we will indemnify such officer or director, under the circumstances and to the extent provided for therein, for expenses, damages, judgments, fines and settlements he may be required to pay in actions or proceedings which he is or may be made a party by reason of his position as a director, officer or other agent of ours, and otherwise to the full extent permitted under Delaware law and our Bylaws.

HOUSEHOLDING OF PROXY MATERIALS

The SEC has adopted rules that permit companies and intermediaries (e.g., brokers) to satisfy the delivery requirements for proxy statements and annual reports with respect to two or more stockholders sharing the same address by delivering a single proxy statement addressed to those stockholders. This process, which is commonly referred to as "householding," potentially means extra convenience for stockholders and cost savings for companies.

This year, a number of brokers with account holders who are Sequenom stockholders will be "householding" our proxy materials. A single proxy statement will be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be "householding" communications to your address, "householding" will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in "householding" and would prefer to receive a separate proxy statement and annual report, please notify your broker, bank or other agent, and direct a written request to Investor Relations, Sequenom, Inc., 3595 John Hopkins Court, San Diego, California 92121 or contact us at (858) 202-9000. Stockholders who currently receive multiple copies of the proxy statement at their address and would like to request "householding" of their communications should contact their broker, bank or other agent.

AVAILABLE INFORMATION

A copy of the Company's Annual Report to the SEC on Form 10-K for the fiscal year ended December 31, 2007 is available without charge upon written request to: Finance Department, Sequenom, Inc., 3595 John Hopkins Court, San Diego, California 92121 or by telephone at (858) 202-9000.

OTHER MATTERS

The Board of Directors knows of no other matters that will be presented for consideration at the Annual Meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy to vote on such matters in accordance with their best judgment.

BY ORDER OF THE BOARD OF DIRECTORS

Harry Stylli
President and Chief Executive Officer

April 10, 2008

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APPENDIX A

Sequenom, Inc.

2006 Equity Incentive Plan
Approved By Board: April 10, 2006
Approved By Stockholders: May 31, 2006
Termination Date: April 9, 2016
(Adjusted to Reflect 1-for-3 reverse stock split effected June 1, 2006)

1. General.

(a) Successor to Prior Plan. This Plan was adopted by the Board on the Adoption Date to be effective as provided in Section 11 on the Effective Date. The Plan is intended as the successor to the Sequenom, Inc. 1999 Stock Incentive Plan (the "***Prior Plan***"). Following the Effective Date of this Plan, no additional stock awards shall be granted under the Prior Plan. Any shares remaining available for issuance pursuant to the exercise of options or settlement of stock awards under the Prior Plan shall be added to the share reserve of this Plan and available for issuance pursuant to Stock Awards granted hereunder. All outstanding stock awards granted under the Prior Plan shall remain subject to the terms of the Prior Plan, except that the Board may elect to extend one or more of the features of the Plan to stock awards granted under the Prior Plan. Any shares subject to outstanding stock awards granted under the Prior Plan that expire or terminate for any reason prior to exercise or settlement shall be added to the share reserve of this Plan and become available for issuance pursuant to Stock Awards granted hereunder. All Stock Awards granted subsequent to the Effective Date of this Plan shall be subject to the terms of this Plan.

(b) Eligible Award Recipients. The persons eligible to receive Awards are Employees, Directors and Consultants.

(c) Available Awards. The Plan provides for the grant of the following Awards: (i) Incentive Stock Options, (ii) Nonstatutory Stock Options, (iii) Restricted Stock Awards, (iv) Restricted Stock Unit Awards, (v) Stock Appreciation Rights, (vi) Performance Stock Awards, (vii) Performance Cash Awards, and (viii) Other Stock Awards.

(d) General Purpose. The Company, by means of the Plan, seeks to secure and retain the services of the group of persons eligible to receive Awards as set forth in Section 1(b), to provide incentives for such persons to exert maximum efforts for the success of the Company and any Affiliate and to provide a means by which such eligible recipients may be given an opportunity to benefit from increases in value of the Common Stock through the granting of Stock Awards.

2. Administration.

(a) Administration by Board. The Board shall administer the Plan unless and until the Board delegates administration of the Plan to a Committee or Committees, as provided in Section 2(c).

(b) Powers of Board. The Board shall have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine from time to time (A) which of the persons eligible under the Plan shall be granted Awards; (B) when and how each Award shall be granted; (C) what type or combination of types of Award shall be granted; (D) the provisions of each Award granted (which need not be identical), including the time or times when a person shall be permitted to receive cash or Common Stock pursuant to a Stock Award; and (E) the number of shares of Common Stock with respect to which a Stock Award shall be granted to each such person.

(ii) To construe and interpret the Plan and Awards granted under it, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan or in any Stock Award Agreement or in the written terms of a Performance Cash Award, in a manner and to the extent it shall deem necessary or expedient to make the Plan or Award fully effective.

(iii) To settle all controversies regarding the Plan and Awards granted under it.

(iv) To accelerate the time at which a Stock Award may first be exercised or the time during which an Award or any part thereof will vest in accordance with the Plan, notwithstanding the provisions in the Award stating the time at which it may first be exercised or the time during which it will vest.

(v) To suspend or terminate the Plan at any time. Suspension or termination of the Plan shall not impair rights and obligations under any Stock Award granted while the Plan is in effect except with the written consent of the affected Participant.

(vi) To amend the Plan in any respect the Board deems necessary or advisable, including, without limitation, relating to Incentive Stock Options and certain nonqualified deferred compensation under 409A of the Code and/or to bring the Plan or Stock Awards granted under the Plan into compliance therewith, subject to the limitations, if any, of applicable law. However, except as provided in Section 9(a) relating to Capitalization Adjustments, stockholder approval shall be required for any amendment of the Plan that either (i) materially increases the number of shares of Common Stock available for issuance under the Plan, (ii) materially expands the class of individuals eligible to receive Awards under the Plan, (iii) materially increases the benefits accruing to Participants under the Plan or materially reduces the price at which shares of Common Stock may be issued or purchased under the Plan, (iv) materially extends the term of the Plan, or (v) expands the types of Awards available for issuance under the Plan, but only to the extent required by applicable law or listing requirements. Except as provided above, rights under any Award granted before amendment of the Plan shall not be impaired by any amendment of the Plan unless (i) the Company requests the consent of the affected Participant, and (ii) such Participant consents in writing.

(vii) To submit any amendment to the Plan for stockholder approval, including, but not limited to, amendments to the Plan intended to satisfy the requirements of (i) Section 162(m) of the Code and the regulations thereunder regarding the exclusion of performance-based compensation from the limit on corporate deductibility of compensation paid to Covered Employees, (ii) Section 422 of the Code regarding Incentive Stock Options or (iii) Rule 16b-3.

(viii) To approve forms of Award Agreements for use under the Plan and to amend the terms of any one or more Awards or stock awards granted under the Prior Plan, including, but not limited to, amendments to provide terms more favorable than previously provided in the Award Agreement, subject to any specified limits in the Plan that are not subject to Board discretion; *provided however,* that, the rights under any Award shall not be impaired by any such amendment unless (i) the Company requests the consent of the affected Participant, and (ii) such Participant consents in writing. Notwithstanding the foregoing, subject to the limitations of applicable law, if any, and without the affected Participant's consent, the Board may amend the terms of any one or more Awards if necessary to maintain the qualified status of the Award as an Incentive Stock Option or to bring the Award into compliance with Code Section 409A and the related guidance thereunder.

(ix) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Plan or Awards.

(x) To adopt such procedures and sub-plans as are necessary or appropriate to permit participation in the Plan by Employees, Directors or Consultants who are foreign nationals or employed outside the United States.

(c) Delegation to Committee.

(i) General. The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration of the Plan is delegated to a Committee, the Committee shall have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee of the Committee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board shall thereafter be to the Committee or subcommittee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, revest in the Board some or all of the powers previously delegated.

(ii) Section 162(m) and Rule 16b-3 Compliance. In the sole discretion of the Board, the Committee may consist solely of two or more Outside Directors, in accordance with Section 162(m) of the Code, or solely of two or more Non-Employee Directors, in accordance with Rule 16b-3. In addition, the Board or the Committee, in its sole discretion, may (A) delegate to a Committee of Directors who need not be Outside Directors the authority to grant Awards to eligible persons who are either (I) not then Covered Employees and are not expected to be Covered Employees at the time of recognition of income resulting from such Stock Award, or (II) not persons with respect to whom the Company wishes to comply with Section 162(m) of the Code, or (B) delegate to a Committee of Directors who need not be Non-Employee Directors the authority to grant Stock Awards to eligible persons who are not then subject to Section 16 of the Exchange Act.

(d) Delegation to an Officer. The Board may delegate to one or more Officers the authority to do one or both of the following (i) designate Employees who are not Officers to be recipients of Options (and, to the extent permitted by applicable law, other Stock Awards) and the terms thereof, and (ii) determine the number of shares of Common Stock to be subject to such Stock Awards granted to such Employees; *provided, however,* that the Board resolutions regarding such delegation shall specify the total number of shares of Common Stock that may be subject to the Stock Awards granted by such Officer and that such Officer may not grant a Stock Award to himself or herself. Notwithstanding anything to the contrary in this Section 2(d), the Board may not delegate to an Officer authority to determine the Fair Market Value of the Common Stock pursuant to Section 13(v)(ii) below.

(e) Effect of Board's Decision. All determinations, interpretations and constructions made by the Board in good faith shall not be subject to review by any person and shall be final, binding and conclusive on all persons.

(f) Cancellation and Re-Grant of Stock Awards. Neither the Board nor any Committee shall have the authority to: (i) reprice any outstanding Stock Awards under the Plan, or (ii) cancel and re-grant any outstanding Stock Awards under the Plan, unless the stockholders of the Company have approved such an action within twelve (12) months prior to such an event.

3. SHARES SUBJECT TO THE PLAN.

(a) Share Reserve. Subject to the provisions of Section 9 relating to adjustments upon changes in stock, the aggregate number of shares of Common Stock that may be issued pursuant to Stock Awards after the Effective Date shall not exceed, in the aggregate, the sum of (i) five million (5,000,000) shares, plus (ii) the number of shares remaining available for issuance under the Prior Plan as of the Effective Date, plus (iii) the number of shares added to the reserve pursuant to subsection 3(b) (the ***"Share Reserve"***). For clarity, the limitation in this subsection 3(a) is a limitation in the number of shares of Common Stock that may be issued pursuant to the Plan. Accordingly, this subsection 3(a) does not limit the granting of Stock Awards except as provided in subsection 7(a). Shares may be issued in connection with a merger or acquisition as permitted by NASD Rule 4350(i)(1)(A)(iii) or, if applicable, NYSE Listed Company Manual Section 303A.08, or AMEX Company Guide Section 711 and such issuance shall not reduce the number of shares available for issuance under the Plan.

Furthermore, if a Stock Award (i) expires or otherwise terminates without having been exercised in full or (ii) is settled in cash (*i.e.*, the holder of the Stock Award receives cash rather than stock), such expiration, termination or settlement shall not reduce (or otherwise offset) the number of shares of the Common Stock that may be issued pursuant to the Plan.

(b) Additions to the Share Reserve. The Share Reserve under the Plan also shall be increased from time to time by a number of shares equal to the number of shares of Common Stock that (i) are issuable pursuant to options or stock awards outstanding under the Prior Plan as of the Effective Date and (ii) but for this provision, would otherwise have reverted to, or remained available for future issuance under, the share reserve of the Prior Plan pursuant to the provisions thereof.

(c) Reversion of Shares to the Share Reserve. If any shares of common stock issued pursuant to a Stock Award (including the stock awards transferred from the Prior Plan on the Effective Date of this Plan) are forfeited back to the Company because of the failure to meet a contingency or condition required to vest such shares in the Participant, then the shares which are forfeited shall revert to and again become available for issuance under the Plan. Also, any shares reacquired by the Company pursuant to subsection 8(g) or as consideration for the exercise of an Option shall again become available for issuance under the Plan. Notwithstanding the provisions of this subsection 3(c), any such shares shall not be subsequently issued pursuant to the exercise of Incentive Stock Options.

(d) Incentive Stock Option Limit. Subject to the provisions of Section 9(a) relating to Capitalization Adjustments the aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options granted after the Effective Date shall be the number of shares of Common Stock in the Share Reserve.

(e) Section 162(m) Limitation on Annual Grants. Subject to the provisions of Section 9(a) relating to Capitalization Adjustments, at such time as the Company may be subject to the applicable provisions of Section 162(m) of the Code, no Employee shall be eligible to be granted during any calendar year Stock Awards whose value is determined by reference to an increase over an exercise or strike price of at least one hundred percent (100%) of the Fair Market Value of the Common Stock on the date the Stock Award is granted covering more than one million six hundred sixty-six thousand, six hundred and sixty-six (1,666,666) shares of Common Stock.

(f) Source of Shares. The stock issuable under the Plan shall be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the market or otherwise.

4. ELIGIBILITY.

(a) Eligibility for Specific Stock Awards. Incentive Stock Options may be granted only to employees of the Company or a parent corporation or subsidiary corporation (as such terms are defined in Code Sections 424(e) and (f)). Stock Awards other than Incentive Stock Options may be granted to Employees, Directors and Consultants.

(b) Ten Percent Stockholders. A Ten Percent Stockholder shall not be granted an Incentive Stock Option unless the exercise price of such Option is at least one hundred ten percent (110%) of the Fair Market Value of the Common Stock on the date of grant and the Option is not exercisable after the expiration of five (5) years from the date of grant.

(c) Consultants. A Consultant shall be eligible for the grant of a Stock Award only if, at the time of grant, a Form S-8 Registration Statement under the Securities Act (***"Form S-8"***) is available to register either the offer or the sale of the Company's securities to such Consultant because of the nature of the services that the Consultant is providing to the Company, because the Consultant is a natural person, or because of any other rule governing the use of Form S-8.

5. Option Provisions.

Each Option shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. All Options shall be separately designated Incentive Stock Options or Nonstatutory Stock Options at the time of grant, and, if certificates are issued, a separate certificate or certificates shall be issued for shares of Common Stock purchased on exercise of each type of Option. If an Option is not specifically designated as an Incentive Stock Option, then the Option shall be a Nonstatutory Stock Option. The provisions of separate Options need not be identical; *provided, however*, that each Option Agreement shall include (through incorporation of provisions hereof by reference in the Option Agreement or otherwise) the substance of each of the following provisions:

(a) Term. Subject to the provisions of Section 4(b) regarding Ten Percent Stockholders, no Option shall be exercisable after the expiration of ten (10) years from the date of its grant or such shorter period specified in the Option Agreement.

(b) Exercise Price. Subject to the provisions of Section 4(b) regarding Ten Percent Stockholders, the exercise price of each Option shall be not less than one hundred percent (100%) of the Fair Market Value of the Common Stock subject to the Option on the date the Option is granted. Notwithstanding the foregoing, an Option may be granted with an exercise price lower than one hundred percent (100%) of the Fair Market Value of the Common Stock subject to the Option if such Option is granted pursuant to an assumption or substitution for another option in a manner consistent with the provisions of Section 424(a) of the Code (whether or not such options are Incentive Stock Options).

(c) Consideration. The purchase price of Common Stock acquired pursuant to the exercise of an Option shall be paid, to the extent permitted by applicable law and as determined by the Board in its sole discretion, by any combination of the methods of payment set forth below. The Board shall have the authority to grant Options that do not permit all of the following methods of payment (or otherwise restrict the ability to use certain methods) and to grant Options that require the consent of the Company to utilize a particular method of payment. The methods of payment permitted by this Section 5(c) are:

(i) by cash, check, bank draft or money order payable to the Company;

(ii) pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of the stock subject to the Option, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds;

(iii) by delivery to the Company (either by actual delivery or attestation) of shares of Common Stock;

(iv) by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issued upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; *provided, however,* that the Company shall accept a cash or other payment from the Participant to the extent of any remaining balance of the aggregate exercise price not satisfied by such reduction in the number of whole shares to be issued; *provided, further,* that shares of Common Stock will no longer be outstanding under an Option and will not be exercisable thereafter to the extent that (A) shares are used to pay the exercise price pursuant to the "net exercise," (B) shares are delivered to the Participant as a result of such exercise, and (C) shares are withheld to satisfy tax withholding obligations; or

(v) in any other form of legal consideration that may be acceptable to the Board.

(d) Transferability of Options. The Board may, in its sole discretion, impose such limitations on the transferability of Options as the Board shall determine. In the absence of such a determination by the Board to the contrary, the following restrictions on the transferability of Options shall apply:

(i) Restrictions on Transfer. An Option shall not be transferable except by will or by the laws of descent and distribution and shall be exercisable during the lifetime of the Optionholder only by the Optionholder; provided, however, that the Board may, in its sole discretion, permit transfer of the Option in a manner consistent with applicable tax and securities laws upon the Optionholder's request.

(ii) Domestic Relations Orders. Notwithstanding the foregoing, an Option may be transferred pursuant to a domestic relations order, *provided, however,* that an Incentive Stock Option may be deemed to be a Nonqualified Stock Option as a result of such transfer.

(iii) Beneficiary Designation. Notwithstanding the foregoing, the Optionholder may, by delivering written notice to the Company, in a form provided by or otherwise satisfactory to the Company, designate a third party who, in the event of the death of the Optionholder, shall thereafter be entitled to exercise the Option.

(e) Vesting Generally. The total number of shares of Common Stock subject to an Option may vest and therefore become exercisable in periodic installments that may or may not be equal. The Option may be subject to such other terms and conditions on the time or times when it may or may not be exercised (which may be based on the satisfaction of Performance Goals or other criteria) as the Board may deem appropriate. The vesting provisions of individual Options may vary. The provisions of this Section 5(e) are subject to any Option provisions governing the minimum number of shares of Common Stock as to which an Option may be exercised.

(f) Termination of Continuous Service. Except as otherwise provided in the applicable Option Agreement or other agreement between the Optionholder and the Company, in the event that an Optionholder's Continuous Service terminates (other than upon the Optionholder's death or Disability), the Optionholder may exercise his or her Option (to the extent that the Optionholder was entitled to exercise such Option as of the date of termination of Continuous Service) but only within such period of time ending on the earlier of (i) the date three (3) months following the termination of the Optionholder's Continuous Service (or such longer or shorter period specified in the Option Agreement), or (ii) the expiration of the term of the Option as set forth in the Option Agreement. If, after termination of Continuous Service, the Optionholder does not exercise his or her Option within the time specified herein or in the Option Agreement (as applicable), the Option shall terminate.

(g) Extension of Termination Date. An Optionholder's Option Agreement may provide that if the exercise of the Option following the termination of the Optionholder's Continuous Service (other than upon the Optionholder's death or Disability) would be prohibited at any time solely because the issuance of shares of Common Stock would violate the registration requirements under the Securities Act, then the Option shall terminate on the earlier of (i) the expiration of the applicable period of time after the termination of the Optionholder's Continuous Service during which the exercise of the Option would not be in violation of such registration requirements, or (ii) the expiration of the term of the Option as set forth in the Option Agreement.

(h) Disability of Optionholder. In the event that an Optionholder's Continuous Service terminates as a result of the Optionholder's Disability, the Optionholder may exercise his or her Option (to the extent that the Optionholder was entitled to exercise such Option as of the date of termination of Continuous Service), but only within such period of time ending on the earlier of (i) the date twelve (12) months following such termination of Continuous Service (or such longer or shorter period specified in the Option Agreement), or (ii) the expiration of the term of the Option as set forth in the Option Agreement. If, after termination of Continuous Service, the Optionholder does not exercise his or her Option within the time specified herein or in the Option Agreement (as applicable), the Option shall terminate.

(i) Death of Optionholder. In the event that (i) an Optionholder's Continuous Service terminates as a result of the Optionholder's death, or (ii) the Optionholder dies within the period (if any) specified in the Option Agreement after the termination of the Optionholder's Continuous Service for a reason other than death, then the Option may be exercised (to the extent the Optionholder was entitled to exercise such Option as of the date of death) by the Optionholder's estate, by a person who acquired the right to exercise the Option by bequest or inheritance or by a person designated to exercise the option upon the Optionholder's death, but only within the period ending on the earlier of (i) the date twelve (12) months following the date of death (or such longer or shorter period specified in the Option Agreement), or (ii) the expiration of the term of such Option as set forth in the Option Agreement. If, after the Optionholder's death, the Option is not exercised within the time specified herein or in the Option Agreement (as applicable), the Option shall terminate.

(j) Non-Exempt Employees. No Option granted to an Employee that is a non-exempt employee for purposes of the Fair Labor Standards Act shall be first exercisable for any shares of Common Stock until at least

six months following the date of grant of the Option. The foregoing provision is intended to operate so that any income derived by a non-exempt employee in connection with the exercise or vesting of an Option will be exempt from his or her regular rate of pay.

6. PROVISIONS OF STOCK AWARDS OTHER THAN OPTIONS.

(a) Restricted Stock Awards. Each Restricted Stock Award Agreement shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. To the extent consistent with the Company's Bylaws, at the Board's election, shares of Common Stock may be (x) held in book entry form subject to the Company's instructions until any restrictions relating to the Restricted Stock Award lapse; or (y) evidenced by a certificate, which certificate shall be held in such form and manner as determined by the Board. The terms and conditions of Restricted Stock Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Award Agreements need not be identical, *provided, however*, that each Restricted Stock Award Agreement shall include (through incorporation of provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(i) Consideration. A Restricted Stock Award may be awarded in consideration for (A) past or future services actually or to be rendered to the Company or an Affiliate, or (B) any other form of legal consideration that may be acceptable to the Board in its sole discretion and permissible under applicable law.

(ii) Vesting. Shares of Common Stock awarded under the Restricted Stock Award Agreement may be subject to forfeiture to the Company in accordance with a vesting schedule to be determined by the Board.

(iii) Termination of Participant's Continuous Service. In the event a Participant's Continuous Service terminates, the Company may receive via a forfeiture condition, any or all of the shares of Common Stock held by the Participant which have not vested as of the date of termination of Continuous Service under the terms of the Restricted Stock Award Agreement.

(iv) Transferability. Rights to acquire shares of Common Stock under the Restricted Stock Award Agreement shall be transferable by the Participant only upon such terms and conditions as are set forth in the Restricted Stock Award Agreement, as the Board shall determine in its sole discretion, so long as Common Stock awarded under the Restricted Stock Award Agreement remains subject to the terms of the Restricted Stock Award Agreement.

(b) Restricted Stock Unit Awards. Each Restricted Stock Unit Award Agreement shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. The terms and conditions of Restricted Stock Unit Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Unit Award Agreements need not be identical, *provided, however,* that each Restricted Stock Unit Award Agreement shall include (through incorporation of the provisions hereof by reference in the Agreement or otherwise) the substance of each of the following provisions:

(i) Consideration. At the time of grant of a Restricted Stock Unit Award, the Board will determine the consideration, if any, to be paid by the Participant upon delivery of each share of Common Stock subject to the Restricted Stock Unit Award. The consideration to be paid (if any) by the Participant for each share of Common Stock subject to a Restricted Stock Unit Award may be paid in any form of legal consideration that may be acceptable to the Board in its sole discretion and permissible under applicable law.

(ii) Vesting. At the time of the grant of a Restricted Stock Unit Award, the Board may impose such restrictions or conditions to the vesting of the Restricted Stock Unit Award as it, in its sole discretion, deems appropriate.

(iii) Payment. A Restricted Stock Unit Award may be settled by the delivery of shares of Common Stock, their cash equivalent, any combination thereof or in any other form of consideration, as determined by the Board and contained in the Restricted Stock Unit Award Agreement.

(iv) Additional Restrictions. At the time of the grant of a Restricted Stock Unit Award, the Board, as it deems appropriate, may impose such restrictions or conditions that delay the delivery of the shares of Common

Stock (or their cash equivalent) subject to a Restricted Stock Unit Award to a time after the vesting of such Restricted Stock Unit Award.

(v) Dividend Equivalents. Dividend equivalents may be credited in respect of shares of Common Stock covered by a Restricted Stock Unit Award, as determined by the Board and contained in the Restricted Stock Unit Award Agreement. At the sole discretion of the Board, such dividend equivalents may be converted into additional shares of Common Stock covered by the Restricted Stock Unit Award in such manner as determined by the Board. Any additional shares covered by the Restricted Stock Unit Award credited by reason of such dividend equivalents will be subject to all the terms and conditions of the underlying Restricted Stock Unit Award Agreement to which they relate.

(vi) Termination of Participant's Continuous Service. Except as otherwise provided in the applicable Restricted Stock Unit Award Agreement, such portion of the Restricted Stock Unit Award that has not vested will be forfeited upon the Participant's termination of Continuous Service.

(vii) Compliance with Section 409A of the Code. Notwithstanding anything to the contrary set forth herein, any Restricted Stock Unit Award granted under the Plan that is not exempt from the requirements of Section 409A of the Code shall contain such provisions so that such Restricted Stock Unit Award will comply with the requirements of Section 409A of the Code. Such restrictions, if any, shall be determined by the Board and contained in the Restricted Stock Unit Award Agreement evidencing such Restricted Stock Unit Award. For example, such restrictions may include, without limitation, a requirement that any Common Stock that is to be issued in a year following the year in which the Restricted Stock Unit Award vests must be issued in accordance with a fixed pre-determined schedule.

(c) Stock Appreciation Rights. Each Stock Appreciation Right Agreement shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. Stock Appreciation Rights may be granted as stand-alone Stock Awards or in tandem with other Stock Awards. The terms and conditions of Stock Appreciation Right Agreements may change from time to time, and the terms and conditions of separate Stock Appreciation Right Agreements need not be identical; *provided, however*, that each Stock Appreciation Right Agreement shall include (through incorporation of the provisions hereof by reference in the Agreement or otherwise) the substance of each of the following provisions:

(i) Term. No Stock Appreciation Right shall be exercisable after the expiration of ten (10) years from the date of its grant or such shorter period specified in the Stock Appreciation Right Agreement.

(ii) Strike Price. Each Stock Appreciation Right will be denominated in shares of Common Stock equivalents. The strike price of each Stock Appreciation Right shall not be less than one hundred percent (100%) of the Fair Market Value of the Common Stock equivalents subject to the Stock Appreciation Right on the date of grant.

(iii) Calculation of Appreciation. The appreciation distribution payable on the exercise of a Stock Appreciation Right will be not greater than an amount equal to the excess of (A) the aggregate Fair Market Value (on the date of the exercise of the Stock Appreciation Right) of a number of shares of Common Stock equal to the number of share of Common Stock equivalents in which the Participant is vested under such Stock Appreciation Right, and with respect to which the Participant is exercising the Stock Appreciation Right on such date, over (B) the strike price that will be determined by the Board at the time of grant of the Stock Appreciation Right.

(iv) Vesting. At the time of the grant of a Stock Appreciation Right, the Board may impose such restrictions or conditions to the vesting of such Stock Appreciation Right as it, in its sole discretion, deems appropriate.

(v) Exercise. To exercise any outstanding Stock Appreciation Right, the Participant must provide written notice of exercise to the Company in compliance with the provisions of the Stock Appreciation Right Agreement evidencing such Stock Appreciation Right.

(vi) Payment. The appreciation distribution in respect to a Stock Appreciation Right may be paid in Common Stock, in cash, in any combination of the two or in any other form of consideration, as determined by the Board and contained in the Stock Appreciation Right Agreement evidencing such Stock Appreciation Right.

(vii) Termination of Continuous Service. In the event that a Participant's Continuous Service terminates, the Participant may exercise his or her Stock Appreciation Right (to the extent that the Participant was entitled to exercise such Stock Appreciation Right as of the date of termination) but only within such period of time ending on the earlier of (A) the date three (3) months following the termination of the Participant's Continuous Service (or such longer or shorter period specified in the Stock Appreciation Right Agreement), or (B) the expiration of the term of the Stock Appreciation Right as set forth in the Stock Appreciation Right Agreement. If, after termination, the Participant does not exercise his or her Stock Appreciation Right within the time specified herein or in the Stock Appreciation Right Agreement (as applicable), the Stock Appreciation Right shall terminate.

(viii) Compliance with Section 409A of the Code. Notwithstanding anything to the contrary set forth herein, any Stock Appreciation Rights granted under the Plan that are not exempt from the requirements of Section 409A of the Code shall contain such provisions so that such Stock Appreciation Rights will comply with the requirements of Section 409A of the Code. Such restrictions, if any, shall be determined by the Board and contained in the Stock Appreciation Right Agreement evidencing such Stock Appreciation Right. For example, such restrictions may include, without limitation, a requirement that a Stock Appreciation Right that is to be paid wholly or partly in cash must be exercised and paid in accordance with a fixed pre-determined schedule.

(d) Performance Awards.

(i) Performance Stock Awards. A Performance Stock Award is a Stock Award that may be granted, may vest, or may be exercised based upon the attainment during a Performance Period of certain Performance Goals. A Performance Stock Award may, but need not, require the completion of a specified period of Continuous Service. The length of any Performance Period, the Performance Goals to be achieved during the Performance Period, and the measure of whether and to what degree such Performance Goals have been attained shall be conclusively determined by the Committee in its sole discretion. The maximum number of shares that may be granted to any Participant in a calendar year attributable to Stock Awards described in this Section 6(d)(i) shall not exceed one million six hundred sixty-six thousand, six hundred sixty-six (1,666,666) shares of Common Stock. In addition, to the extent permitted by applicable law and the applicable Award Agreement, the Board may determine that cash may be used in payment of Performance Stock Awards.

(ii) Performance Cash Awards. A Performance Cash Award is a cash award that may be granted upon the attainment during a Performance Period of certain Performance Goals. A Performance Cash Award may also require the completion of a specified period of Continuous Service. The length of any Performance Period, the Performance Goals to be achieved during the Performance Period, and the measure of whether and to what degree such Performance Goals have been attained shall be conclusively determined by the Committee in its sole discretion. The maximum value that may be granted to any Participant in a calendar year attributable to cash awards described in this Section 6(d)(ii) shall not exceed one million dollars ($1,000,000). The Board may provide for or, subject to such terms and conditions as the Board may specify, may permit a Participant to elect for, the payment of any Performance Cash Award to be deferred to a specified date or event. The Administrator may specify the form of payment of Performance Cash Awards, which may be cash or other property, or may provide for a Participant to have the option for his or her Performance Cash Award, or such portion thereof as the Board may specify, to be paid in whole or in part in cash or other property. In addition, to the extent permitted by applicable law and the applicable Award Agreement, the Board may determine that Common Stock authorized under this Plan may be used in payment of Performance Cash Awards, including additional shares in excess of the Performance Cash Award as an inducement to hold shares of Common Stock.

(e) Other Stock Awards. Other forms of Stock Awards valued in whole or in part by reference to, or otherwise based on, Common Stock may be granted either alone or in addition to Stock Awards provided for under Section 5 and the preceding provisions of this Section 6. Subject to the provisions of the Plan, the Board

shall have sole and complete authority to determine the persons to whom and the time or times at which such Other Stock Awards will be granted, the number of shares of Common Stock (or the cash equivalent thereof) to be granted pursuant to such Other Stock Awards and all other terms and conditions of such Other Stock Awards.

7. COVENANTS OF THE COMPANY.

(a) Availability of Shares. During the terms of the Stock Awards, the Company shall keep available at all times the number of shares of Common Stock reasonably required to satisfy such Stock Awards.

(b) Securities Law Compliance. The Company shall seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Stock Awards and to issue and sell shares of Common Stock upon exercise of the Stock Awards; *provided, however,* that this undertaking shall not require the Company to register under the Securities Act the Plan, any Stock Award or any Common Stock issued or issuable pursuant to any such Stock Award. If, after reasonable efforts, the Company is unable to obtain from any such regulatory commission or agency the authority that counsel for the Company deems necessary for the lawful issuance and sale of Common Stock under the Plan, the Company shall be relieved from any liability for failure to issue and sell Common Stock upon exercise of such Stock Awards unless and until such authority is obtained.

(c) No Obligation to Notify. The Company shall have no duty or obligation to any holder of a Stock Award to advise such holder as to the time or manner of exercising such Stock Award. Furthermore, the Company shall have no duty or obligation to warn or otherwise advise such holder of a pending termination or expiration of a Stock Award or a possible period in which the Stock Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of a Stock Award to the holder of such Stock Award.

8. MISCELLANEOUS.

(a) Use of Proceeds from Sales of Common Stock. Proceeds from the sale of shares of Common Stock pursuant to Stock Awards shall constitute general funds of the Company.

(b) Corporate Action Constituting Grant of Stock Awards. Corporate action constituting a grant by the Company of a Stock Award to any Participant shall be deemed completed as of the date of such corporate action, unless otherwise determined by the Board, regardless of when the instrument, certificate, or letter evidencing the Stock Award is communicated to, or actually received or accepted by, the Participant.

(c) Stockholder Rights. No Participant shall be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to such Stock Award unless and until such Participant has exercised the Stock Award pursuant to its terms and the Participant shall not be deemed to be a stockholder of record until the issuance of the Common Stock pursuant to such exercise has been entered into the books and records of the Company.

(d) No Employment or Other Service Rights. Nothing in the Plan, any Stock Award Agreement or other instrument executed thereunder or in connection with any Award granted pursuant to the Plan shall confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Stock Award was granted or shall affect the right of the Company or an Affiliate to terminate (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such Consultant's agreement with the Company or an Affiliate, or (iii) the service of a Director pursuant to the Bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state in which the Company or the Affiliate is incorporated, as the case may be.

(e) Incentive Stock Option $100,000 Limitation. To the extent that the aggregate Fair Market Value (determined at the time of grant) of Common Stock with respect to which Incentive Stock Options are exercisable for the first time by any Optionholder during any calendar year (under all plans of the Company and any Affiliates) exceeds one hundred thousand dollars ($100,000), the Options or portions thereof that exceed

such limit (according to the order in which they were granted) shall be treated as Nonstatutory Stock Options, notwithstanding any contrary provision of the applicable Option Agreement(s).

(f) Investment Assurances. The Company may require a Participant, as a condition of exercising or acquiring Common Stock under any Stock Award, (i) to give written assurances satisfactory to the Company as to the Participant's knowledge and experience in financial and business matters and/or to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters and that he or she is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Stock Award; and (ii) to give written assurances satisfactory to the Company stating that the Participant is acquiring Common Stock subject to the Stock Award for the Participant's own account and not with any present intention of selling or otherwise distributing the Common Stock. The foregoing requirements, and any assurances given pursuant to such requirements, shall be inoperative if (x) the issuance of the shares upon the exercise or acquisition of Common Stock under the Stock Award has been registered under a then currently effective registration statement under the Securities Act, or (y) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws. The Company may, upon advice of counsel to the Company, place legends on stock certificates issued under the Plan as such counsel deems necessary or appropriate in order to comply with applicable securities laws, including, but not limited to, legends restricting the transfer of the Common Stock.

(g) Withholding Obligations. Unless prohibited by the terms of a Stock Award Agreement, the Company may, in its sole discretion, satisfy any federal, state or local tax withholding obligation relating to an Award by any of the following means (in addition to the Company's right to withhold from any compensation paid to the Participant by the Company) or by a combination of such means: (i) causing the Participant to tender a cash payment; (ii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to the Participant in connection with the Award; (iii) withholding cash from an Award settled in cash; or (iv) by such other method as may be set forth in the Award Agreement.

(h) Electronic Delivery. Any reference herein to a "written" agreement or document shall include any agreement or document delivered electronically or posted on the Company's intranet.

(i) Deferrals. To the extent permitted by applicable law, the Board, in its sole discretion, may determine that the delivery of Common Stock or the payment of cash, upon the exercise, vesting or settlement of all or a portion of any Award may be deferred and may establish programs and procedures for deferral elections to be made by Participants. Deferrals by Participants will be made in accordance with Section 409A of the Code. Consistent with Section 409A of the Code, the Board may provide for distributions while a Participant is still an employee. The Board is authorized to make deferrals of Stock Awards and determine when, and in what annual percentages, Participants may receive payments, including lump sum payments, following the Participant's termination of employment or retirement, and implement such other terms and conditions consistent with the provisions of the Plan and in accordance with applicable law.

(j) Compliance with 409A. To the extent that the Board determines that any Award granted under the Plan is subject to Section 409A of the Code, the Award Agreement evidencing such Award shall incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code. To the extent applicable, the Plan and Award Agreements shall be interpreted in accordance with Section 409A of the Code and Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued or amended after the Effective Date. Notwithstanding any provision of the Plan to the contrary, in the event that following the Effective Date the Board determines that any Award may be subject to Section 409A of the Code and related Department of Treasury guidance (including such Department of Treasury guidance as may be issued after the Effective Date), the Board may adopt such amendments to the Plan and the applicable Award Agreement or adopt other policies and procedures (including amendments, policies and procedures with retroactive effect), or take any other

actions, that the Board determines are necessary or appropriate to (1) exempt the Award from Section 409A of the Code and/or preserve the intended tax treatment of the benefits provided with respect to the Award, or (2) comply with the requirements of Section 409A of the Code and related Department of Treasury guidance.

9. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; OTHER CORPORATE EVENTS.

(a) Capitalization Adjustments. In the event of a Capitalization Adjustment, the Board shall appropriately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 3(a), (ii) the class(es) and maximum number of securities that may be issued pursuant to the exercise of Incentive Stock Options pursuant to Section 3(d), (iii) the class(es) and maximum number of securities that may be awarded to any person pursuant to Section 3(e) and 6(d)(i), and (iv) the class(es) and number of securities and price per share of stock subject to outstanding Stock Awards. The Board shall make such adjustments, and its determination shall be final, binding and conclusive.

(b) Dissolution or Liquidation. Except as otherwise provided in the Stock Award Agreement, in the event of a dissolution or liquidation of the Company, all outstanding Stock Awards (other than Stock Awards consisting of vested and outstanding shares of Common Stock not subject to the Company's right of repurchase) shall terminate immediately prior to the completion of such dissolution or liquidation, and the shares of Common Stock subject to the Company's repurchase option may be repurchased by the Company notwithstanding the fact that the holder of such Stock Award is providing Continuous Service, *provided, however*, that the Board may, in its sole discretion, cause some or all Stock Awards to become fully vested, exercisable and/or no longer subject to repurchase or forfeiture (to the extent such Stock Awards have not previously expired or terminated) before the dissolution or liquidation is completed but contingent on its completion.

(c) Corporate Transaction. The following provisions shall apply to Stock Awards in the event of a Corporate Transaction unless otherwise provided in the instrument evidencing the Stock Award or any other written agreement between the Company or any Affiliate and the holder of the Stock Award or unless otherwise expressly provided by the Board at the time of grant of a Stock Award.

(i) Stock Awards May Be Assumed. Except as otherwise stated in the Stock Award Agreement, in the event of a Corporate Transaction, any surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) may assume or continue any or all Stock Awards outstanding under the Plan or may substitute similar stock awards for Stock Awards outstanding under the Plan (including but not limited to, awards to acquire the same consideration paid to the stockholders of the Company pursuant to the Corporate Transaction), and any reacquisition or repurchase rights held by the Company in respect of Common Stock issued pursuant to Stock Awards may be assigned by the Company to the successor of the Company (or the successor's parent company, if any), in connection with such Corporate Transaction. A surviving corporation or acquiring corporation (or its parent) may choose to assume or continue only a portion of a Stock Award or substitute a similar stock award for only a portion of a Stock Award. The terms of any assumption, continuation or substitution shall be set by the Board in accordance with the provisions of Section 2.

(ii) Stock Awards Held by Current Participants. Except as otherwise stated in the Stock Award Agreement, in the event of a Corporate Transaction in which the surviving corporation or acquiring corporation (or its parent company) does not assume or continue such outstanding Stock Awards or substitute similar stock awards for such outstanding Stock Awards, then with respect to Stock Awards that have not been assumed, continued or substituted and that are held by Participants whose Continuous Service has not terminated prior to the effective time of the Corporate Transaction (referred to as the "***Current Participants***"), the vesting of such Stock Awards (and, if applicable, the time at which such Stock Awards may be exercised) shall (contingent upon the effectiveness of the Corporate Transaction) be accelerated in full to a date prior to the effective time of such Corporate Transaction as the Board shall determine (or, if the Board shall not determine such a date, to the date that is five (5) days prior to the effective time of the Corporate Transaction), and such Stock Awards shall terminate if not exercised (if applicable) at or prior to the effective time of the Corporate Transaction, and any reacquisition or repurchase rights held by the Company with respect to such Stock Awards shall lapse (contingent upon the effectiveness of the Corporate Transaction).

(iii) Stock Awards Held by Persons other than Current Participants. Except as otherwise stated in the Stock Award Agreement, in the event of a Corporate Transaction in which the surviving corporation or acquiring corporation (or its parent company) does not assume or continue such outstanding Stock Awards or substitute similar stock awards for such outstanding Stock Awards, then with respect to Stock Awards that have not been assumed, continued or substituted and that are held by persons other than Current Participants, the vesting of such Stock Awards (and, if applicable, the time at which such Stock Award may be exercised) shall not be accelerated and such Stock Awards (other than a Stock Award consisting of vested and outstanding shares of Common Stock not subject to the Company's right of repurchase) shall terminate if not exercised (if applicable) prior to the effective time of the Corporate Transaction; *provided, however,* that any reacquisition or repurchase rights held by the Company with respect to such Stock Awards shall not terminate and may continue to be exercised notwithstanding the Corporate Transaction.

(iv) Payment for Stock Awards in Lieu of Exercise. Notwithstanding the foregoing, in the event a Stock Award will terminate if not exercised prior to the effective time of a Corporate Transaction, the Board may provide, in its sole discretion, that the holder of any Stock Award that is not exercised prior to such effective time will receive a payment, in such form as may be determined by the Board, equal in value to the excess, if any, of (A) the value of the property the holder of the Stock Award would have received upon the exercise of the Stock Award, over (B) any exercise price payable by such holder in connection with such exercise.

(d) Change in Control. A Stock Award may be subject to additional acceleration of vesting and exercisability upon or after a Change in Control as may be provided in the Stock Award Agreement for such Stock Award or as may be provided in any other written agreement between the Company or any Affiliate and the Participant, but in the absence of such provision, no such acceleration shall occur.

10. TERMINATION OR SUSPENSION OF THE PLAN.

(a) Plan Term. Unless sooner terminated by the Board pursuant to Section 2, the Plan shall automatically terminate on the day before the tenth (10th) anniversary of the date the Plan is adopted by the Board or approved by the stockholders of the Company, whichever is earlier. No Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

(b) No Impairment of Rights. Termination of the Plan shall not impair rights and obligations under any Award granted while the Plan is in effect except with the written consent of the affected Participant.

11. EFFECTIVE DATE OF PLAN.

This Plan shall become effective on the Effective Date. Prior to the Effective Date, the Prior Plan is unaffected by the Plan, and Stock Awards shall continue to be granted from the Prior Plan. If the Plan has not been approved by the stockholders of the Company by the first anniversary of the Adoption Date, the adoption of the Plan shall be null and void and the Prior Plan shall continue unaffected by the adoption of the Plan. If the Plan is so approved, (i) the Prior Plan shall be deemed merged into the Plan and to cease its separate existence and (ii) outstanding options and other awards granted pursuant to the Prior Plan shall automatically become Stock Awards. Notwithstanding that the Prior Plan is merged into the Plan, the terms of the Prior Plan shall continue to govern any Stock Awards granted prior to the Effective Date.

12. CHOICE OF LAW.

The law of the State of California shall govern all questions concerning the construction, validity and interpretation of this Plan, without regard to such state's conflict of laws rules.

13. DEFINITIONS. As used in the Plan, the definitions contained in this Section 13 shall apply to the capitalized terms indicated below:

(a) ***"Adoption Date"*** means April 10, 2006, the date the Plan was adopted by the Board.

(b) ***"Affiliate"*** means, at the time of determination, any "parent" or "subsidiary" as such terms are defined in Rule 405 of the Securities Act. The Board shall have the authority to determine the time or times at which "parent" or "subsidiary" status is determined within the foregoing definition.

(c) ***"Award"*** means a Stock Award or a Performance Cash Award.

(d) ***"Board"*** means the Board of Directors of the Company.

(e) ***"Capitalization Adjustment"*** means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Stock Award after the Effective Date without the receipt of consideration by the Company (through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other transaction not involving the receipt of consideration by the Company. Notwithstanding the foregoing, the conversion of any convertible securities of the Company shall not be treated as a transaction "without receipt of consideration" by the Company.

(f) ***"Change in Control"*** means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) any Exchange Act Person becomes the Owner, directly or indirectly, of securities of the Company representing more than fifty percent (50%) of the combined voting power of the Company's then outstanding securities other than by virtue of a merger, consolidation or similar transaction . Notwithstanding the foregoing, a Change in Control shall not be deemed to occur (A) on account of the acquisition of securities of the Company by an investor, any affiliate thereof or any other Exchange Act Person from the Company in a transaction or series of related transactions the primary purpose of which is to obtain financing for the Company through the issuance of equity securities or (B) solely because the level of Ownership held by any Exchange Act Person (the "*Subject Person*") exceeds the designated percentage threshold of the outstanding voting securities as a result of a repurchase or other acquisition of voting securities by the Company reducing the number of shares outstanding, provided that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition of voting securities by the Company, and after such share acquisition, the Subject Person becomes the Owner of any additional voting securities that, assuming the repurchase or other acquisition had not occurred, increases the percentage of the then outstanding voting securities Owned by the Subject Person over the designated percentage threshold, then a Change in Control shall be deemed to occur;

(ii) there is consummated a merger, consolidation or similar transaction involving (directly or indirectly) the Company and, immediately after the consummation of such merger, consolidation or similar transaction, the stockholders of the Company immediately prior thereto do not Own, directly or indirectly, either (A) outstanding voting securities representing more than fifty percent (50%) of the combined outstanding voting power of the surviving Entity in such merger, consolidation or similar transaction or (B) more than fifty percent (50%) of the combined outstanding voting power of the parent of the surviving Entity in such merger, consolidation or similar transaction, in each case in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such transaction;

(iii) the stockholders of the Company approve or the Board approves a plan of complete dissolution or liquidation of the Company, or a complete dissolution or liquidation of the Company shall otherwise occur, except for a liquidation into a parent corporation;

(iv) there is consummated a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries, other than a sale, lease, license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries to an Entity, more than fifty percent (50%) of the combined voting power of the voting securities of which are Owned by stockholders of the Company in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such sale, lease, license or other disposition; or

(v) individuals who are Directors on the date this Plan is adopted by the Board (collectively, the "Incumbent Board") cease for any reason to constitute at least a majority of the Directors; (*provided, however,*

that if the election (or nomination for election) of any new Director was approved or recommended by a majority vote of the members of the Incumbent Board then still in office or by a majority vote of a committee comprised of such members, such new member shall, for purposes of this Plan, be considered a member of the Incumbent Board).

For Clarity, the term Change in Control shall not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company.

Notwithstanding the foregoing or any other provision of this Plan, the definition of Change in Control (or any analogous term) in an individual written agreement between the Company or any Affiliate and the Participant shall supersede the foregoing definition with respect to Awards subject to such agreement; *provided, however,* that if no definition of Change in Control or any analogous term is set forth in such an individual written agreement, the foregoing definition shall apply.

The Board may, in its sole discretion and without Participant consent, amend the definition of Change in Control to conform to the definition of Change of Control under Section 409A of the Code, as amended, and the Treasury Department or Internal Revenue Service Regulations or Guidance issued thereunder.

(g) ***"Code"*** means the Internal Revenue Code of 1986, as amended.

(h) ***"Committee"*** means a committee of one (1) or more Directors to whom authority has been delegated by the Board in accordance with Section 2(c).

(i) ***"Common Stock"*** means the common stock of the Company.

(j) ***"Company"*** means Sequenom, Inc., a Delaware corporation.

(k) ***"Consultant"*** means any person, including an advisor, who is (i) engaged by the Company or an Affiliate to render consulting or advisory services and is compensated for such services, or (ii) serving as a member of the board of directors of an Affiliate and is compensated for such services. However, service solely as a Director, or payment of a fee for such service, shall not cause a Director to be considered a "Consultant" for purposes of the Plan.

(l) ***"Continuous Service"*** means that the Participant's service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. A change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Consultant or Director or a change in the entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant's service with the Company or an Affiliate, shall not terminate a Participant's Continuous Service. For example, a change in status from an employee of the Company to a consultant to an Affiliate or to a Director shall not constitute an interruption of Continuous Service. To the extent permitted by law, the Board or the chief executive officer of the Company, in that party's sole discretion, may determine whether Continuous Service shall be considered interrupted in the case of any leave of absence approved by that party, including sick leave, military leave or any other personal leave. Notwithstanding the foregoing, a leave of absence shall be treated as Continuous Service for purposes of vesting in a Stock Award only to such extent as may be provided in the Company's leave of absence policy, in the written terms of any leave of absence agreement or policy applicable to the Participant, or as otherwise required by law.

(m) ***"Corporate Transaction"*** means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) a sale or other disposition of all or substantially all, as determined by the Board in its sole discretion, of the consolidated assets of the Company and its Subsidiaries;

(ii) a sale or other disposition of at least ninety percent (90%) of the outstanding securities of the Company;

(iii) the consummation of a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or

(iv) the consummation of a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.

(n) ***"Covered Employee"*** shall have the meaning provided in Section 162(m)(3) of the Code and the regulations promulgated thereunder.

(o) ***"Director"*** means a member of the Board.

(p) ***"Disability"*** means, with respect to a Participant, the inability of such Participant to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than 12 months, as provided in Section 22(e)(3) and 409A(a)(2)(c)(i) of the Code.

(q) "***Effective Date***" means the effective date of this Plan document, which is the date of the annual meeting of stockholders of the Company held in 2006 provided this Plan is approved by the Company's stockholders at such meeting.

(r) ***"Employee"*** means any person employed by the Company or an Affiliate. However, service solely as a Director, or payment of a fee for such services, shall not cause a Director to be considered an "Employee" for purposes of the Plan.

(s) ***"Entity"*** means a corporation, partnership, limited liability company or other entity.

(t) ***"Exchange Act"*** means the Securities Exchange Act of 1934, as amended.

(u) ***"Exchange Act Person"*** means any natural person, Entity or "group" (within the meaning of Section 13(d) or 14(d) of the Exchange Act), except that "Exchange Act Person" shall not include (i) the Company or any Subsidiary of the Company, (ii) any employee benefit plan of the Company or any Subsidiary of the Company or any trustee or other fiduciary holding securities under an employee benefit plan of the Company or any Subsidiary of the Company, (iii) an underwriter temporarily holding securities pursuant to an offering of such securities, (iv) an Entity Owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their Ownership of stock of the Company; or (v) any natural person, Entity or "group" (within the meaning of Section 13(d) or 14(d) of the Exchange Act) that, as of the Effective Date of the Plan as set forth in Section 11, is the Owner, directly or indirectly, of securities of the Company representing more than fifty percent (50%) of the combined voting power of the Company's then outstanding securities.

(v) ***"Fair Market Value"*** means, as of any date, the value of the Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on the Nasdaq National Market or the Nasdaq SmallCap Market, the Fair Market Value of a share of Common Stock shall be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the date of determination, as reported in *The Wall Street Journal* or such other source as the Board deems reliable. Unless otherwise provided by the Board, if there is no closing sales price (or closing bid if no sales were reported) for the Common Stock on the date of determination, then the Fair Market Value shall be the closing selling price (or closing bid if no sales were reported) on the last preceding date for which such quotation exists.

(ii) In the absence of such markets for the Common Stock, the Fair Market Value shall be determined by the Board in good faith.

(w) ***"Incentive Stock Option"*** means an Option that is intended to be, and qualifies as, an "incentive stock option" within the meaning of Section 422 of the Code and the regulations promulgated thereunder.

(x) ***"Non-Employee Director"*** means a Director who either (i) is not a current employee or officer of the Company or an Affiliate, does not receive compensation, either directly or indirectly, from the Company or an Affiliate for services rendered as a consultant or in any capacity other than as a Director (except for an amount as to which disclosure would not be required under Item 404(a) of Regulation S-K promulgated pursuant to the Securities Act (***"Regulation S-K"***)), does not possess an interest in any other transaction for which disclosure would be required under Item 404(a) of Regulation S-K, and is not engaged in a business relationship for which disclosure would be required pursuant to Item 404(b) of Regulation S-K; or (ii) is otherwise considered a "non-employee director" for purposes of Rule 16b-3.

(y) ***"Nonstatutory Stock Option"*** means any Option that does not qualify as an Incentive Stock Option.

(z) ***"Officer"*** means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

(aa) ***"Option"*** means an Incentive Stock Option or a Nonstatutory Stock Option to purchase shares of Common Stock granted pursuant to the Plan.

(bb) ***"Option Agreement"*** means a written agreement between the Company and an Optionholder evidencing the terms and conditions of an Option grant. Each Option Agreement shall be subject to the terms and conditions of the Plan.

(cc) ***"Optionholder"*** means a person to whom an Option is granted pursuant to the Plan or, if permitted under the terms of this Plan, such other person who holds an outstanding Option.

(dd) ***"Other Stock Award"*** means an award based in whole or in part by reference to the Common Stock which is granted pursuant to the terms and conditions of Section 6(d).

(ee) ***"Other Stock Award Agreement"*** means a written agreement between the Company and a holder of an Other Stock Award evidencing the terms and conditions of an Other Stock Award grant. Each Other Stock Award Agreement shall be subject to the terms and conditions of the Plan.

(ff) ***"Outside Director"*** means a Director who either (i) is not a current employee of the Company or an "affiliated corporation" (within the meaning of Treasury Regulations promulgated under Section 162(m) of the Code), is not a former employee of the Company or an "affiliated corporation" who receives compensation for prior services (other than benefits under a tax-qualified retirement plan) during the taxable year, has not been an officer of the Company or an "affiliated corporation," and does not receive remuneration from the Company or an "affiliated corporation," either directly or indirectly, in any capacity other than as a Director, or (ii) is otherwise considered an "outside director" for purposes of Section 162(m) of the Code.

(gg) ***"Own," "Owned," "Owner," "Ownership"*** A person or Entity shall be deemed to "Own," to have "Owned," to be the "Owner" of, or to have acquired "Ownership" of securities if such person or Entity, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares voting power, which includes the power to vote or to direct the voting, with respect to such securities.

(hh) ***"Participant"*** means a person to whom an Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Stock Award.

(ii) ***"Performance Cash Award"*** means an award of cash granted pursuant to the terms and conditions of Section 6(d)(ii).

(jj) ***"Performance Criteria"*** means the one or more criteria that the Board shall select for purposes of establishing the Performance Goals for a Performance Period. The Performance Criteria that shall be used to establish such Performance Goals may be based on any one of, or combination of, the following: (i) earnings per share; (ii) earnings before interest, taxes and depreciation; (iii) earnings before interest, taxes, depreciation and amortization; (iv) total stockholder return; (v) return on equity; (vi) return on assets, investment, or capital employed; (vii) operating margin; (viii) gross margin; (ix) operating income; (x) net income (before or after taxes); (xi) net operating income; (xii) net operating income after tax; (xiii) pre-tax profit; (xiv) operating cash flow; (xv) sales or revenue targets; (xvi) increases in revenue or product revenue; (xvii) expenses and cost reduction goals; (xviii) improvement in or attainment of working capital levels; (xix) economic value added (or an equivalent metric); (xx) market share; (xxi) cash flow; (xxii) cash flow per share; (xxiii) share price performance; (xxiv) debt reduction; (xxv) implementation or completion of projects or processes; (xxvi) customer satisfaction; (xxvii) stockholders' equity; and (xxviii) to the extent that an Award is not intended to comply with Section 162(m) of the Code, other measures of performance selected by the Board. Partial achievement of the specified criteria may result in the payment or vesting corresponding to the degree of achievement as specified in the Stock Award Agreement or the written terms of a Performance Cash Award. The Board shall, in its sole discretion, define the manner of calculating the Performance Criteria it selects to use for such Performance Period.

(kk) ***"Performance Goals"*** means, for a Performance Period, the one or more goals established by the Board for the Performance Period based upon the Performance Criteria. Performance Goals may be based on a Company-wide basis, with respect to one or more business units, divisions, Affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. At the time of the grant of any Award, the Board is authorized to determine whether, when calculating the attainment of Performance Goals for a Performance Period: (i) to exclude restructuring and/or other nonrecurring charges; (ii) to exclude exchange rate effects, as applicable, for non-U.S. dollar denominated net sales and operating earnings; (iii) to exclude the effects of changes to generally accepted accounting standards required by the Financial Accounting Standards Board; (iv) to exclude the effects of any statutory adjustments to corporate tax rates; and (v) to exclude the effects of any "extraordinary items" as determined under generally accepted accounting principles. In addition, the Board retains the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of Performance Goals.

(ll) ***"Performance Period"*** means the period of time selected by the Board over which the attainment of one or more Performance Goals will be measured for the purpose of determining a Participant's right to and the payment of a Stock Award or a Performance Cash Award. Performance Periods may be of varying and overlapping duration, at the sole discretion of the Board.

(mm) ***"Performance Stock Award"*** means a Stock Award granted under the terms and conditions of Section 6(d)(i).

(nn) ***"Plan"*** means this Sequenom, Inc. 2006 Equity Incentive Plan.

(oo) ***"Restricted Stock Award"*** means an award of shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(a).

(pp) ***"Restricted Stock Award Agreement"*** means a written agreement between the Company and a holder of a Restricted Stock Award evidencing the terms and conditions of a Restricted Stock Award grant. Each Restricted Stock Award Agreement shall be subject to the terms and conditions of the Plan.

(qq) ***"Restricted Stock Unit Award"*** means a right to receive shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(b).

(rr) ***"Restricted Stock Unit Award Agreement"*** means a written agreement between the Company and a holder of a Restricted Stock Unit Award evidencing the terms and conditions of a Restricted Stock Unit Award grant. Each Restricted Stock Unit Award Agreement shall be subject to the terms and conditions of the Plan.

(ss) ***"Rule 16b-3"*** means Rule 16b-3 promulgated under the Exchange Act or any successor to Rule 16b-3, as in effect from time to time.

(tt) ***"Securities Act"*** means the Securities Act of 1933, as amended.

(uu) ***"Stock Appreciation Right"*** means a right to receive the appreciation on Common Stock that is granted pursuant to the terms and conditions of Section 6(c).

(vv) ***"Stock Appreciation Right Agreement"*** means a written agreement between the Company and a holder of a Stock Appreciation Right evidencing the terms and conditions of a Stock Appreciation Right grant. Each Stock Appreciation Right Agreement shall be subject to the terms and conditions of the Plan.

(ww) ***"Stock Award"*** means any right to receive Common Stock granted under the Plan, including an Incentive Stock Option, a Nonstatutory Stock Option, a Restricted Stock Award, a Restricted Stock Unit Award, a Stock Appreciation Right, a Performance Stock Award or any Other Stock Award.

(xx) ***"Stock Award Agreement"*** means a written agreement between the Company and a Participant evidencing the terms and conditions of a Stock Award grant. Each Stock Award Agreement shall be subject to the terms and conditions of the Plan.

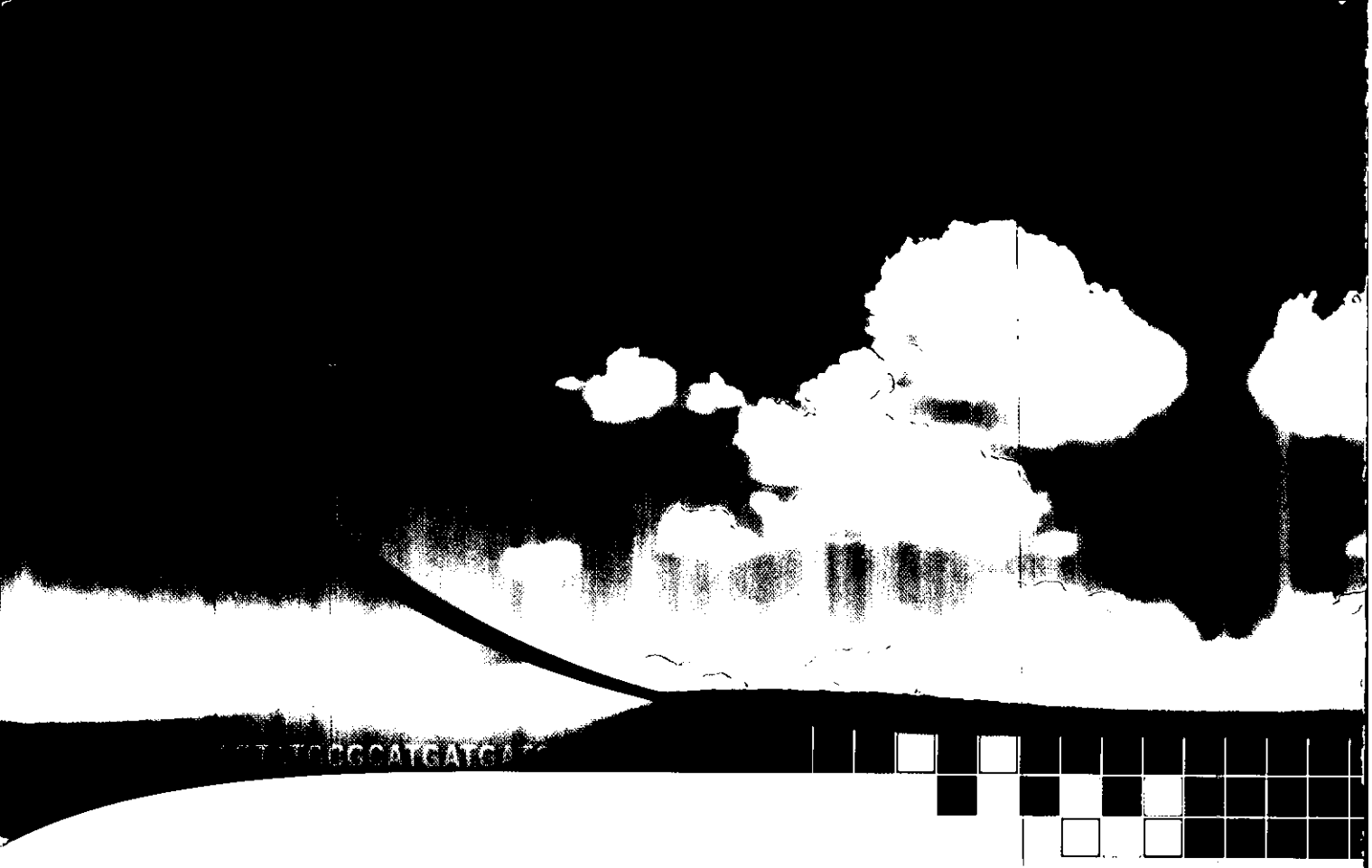
(yy) ***"Subsidiary"*** means, with respect to the Company, (i) any corporation of which more than fifty percent (50%) of the outstanding capital stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether, at the time, stock of any other class or classes of such corporation shall have or might have voting power by reason of the happening of any contingency) is at the time, directly or indirectly, Owned by the Company, and (ii) any partnership, limited liability company or other entity in which the Company has a direct or indirect interest (whether in the form of voting or participation in profits or capital contribution) of more than fifty percent (50%) .

(zz) ***"Ten Percent Stockholder"*** means a person who Owns (or is deemed to Own pursuant to Section 424(d) of the Code) stock possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Affiliate.

We thank all of our employees who volunteered to have their images taken for this year's annual brochure.

Stockholders, investors, and others seeking more information about the company may access the company's proxy statement and other documents filed with the SEC's web site at **http://www.sec.gov** and also by contacting:

Investor Relations, Sequenom, Inc.
3595 John Hopkins Court,
San Diego, CA 92121-1331
Phone (858) 202-9000



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